UNION COLLEGE LIBRARY
5 0702 00127698 9

Weeks-Townsend Memorial Library
Union College
Barbourville, KY 40906

Digitized by the Internet Archive
in 2011 with funding from
LYRASIS Members and Sloan Foundation

http://www.archive.org/details/unioncollegecat198487unio

Virginia Saeder

UNION

1983-84 Catalog

UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY

LEGE IN KENTUCKY • UNION COLLEGE • UNION COLLEGE IN KENTUCKY

CONTENTS

Welcome to Union College 1
Special Programs 5
Admissions 11
College Expenses 13
Financial Assistance 15
Curriculum 33
Campus Information 75
Calendar 82
Administration 84
Faculty 85
Index 89
Application Form 91

DIRECTORY FOR CORRESPONDENCE

Academic Work . . . . . *Vice President for Academic Affairs*
Admission to the College . . . . . *Director of Admissions*
Admission to the Graduate Program . . . . . *Dean of Graduate Academic Affairs*
Alumni Affairs . . . . . *Director of Alumni Affairs*
Applications for Admission, Catalogs . . . . . *Director of Admissions*
Charges and Payment of Bills . . . . . *Business Manager*
Gifts and Bequests . . . . . *Vice President for Development*
Personal Welfare, Health of Students, Housing . . . . . *Vice President for Student Affairs*
Grants, Scholarships, Workstudy and Loans . . . . . *Director of Financial Aid*
Transcripts, Academic Records, Veterans Affairs . . . . . *Registrar*

TELEPHONE COMMUNICATION

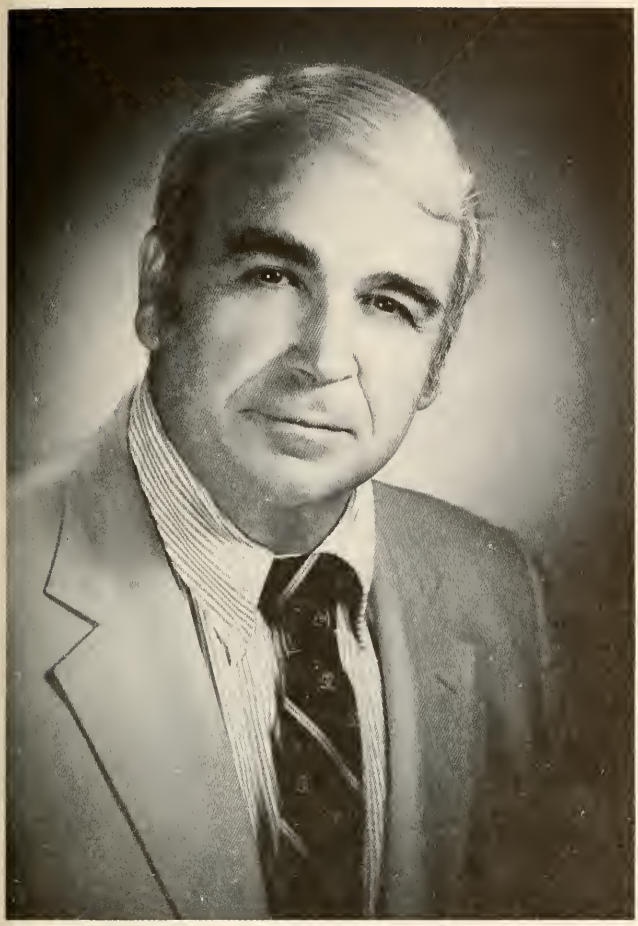
A campus-wide network of telephones enables the caller to reach any administrative or staff office by dialing the central switchboard. After 11 p.m., emergency calls for students may be directed to their dormitory counselors.

Central Switchboard . . . . . **(606) 546-4151**
Counselor, Pfeiffer Hall . . . . . (606) 546-3421
Counselor, Stevenson Hall . . . . . (606) 546-3659

Union College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools, the Kentucky State Department of Education, and approved by the University Senate of the United Methodist Church.

It is the policy of Union College not to discriminate on the basis of sex, race, color, handicap, age, or national or ethnic origin in the admission of students or in its administration of educational programs, scholarships, loan programs, athletic participation, or other school-administered programs. Inquiries should be directed to Mr. Edward H. Black, Affirmative Action Officer.

While this catalog presents information as accurately as possible as of the date of publication, the College reserves the right to make such changes as future circumstances may require.



DR. JACK C. PHILLIPS

Welcome To Union College

We welcome and invite you to examine Union College. Founded in 1879 by Barbourville citizens and purchased in 1886 by the Methodist Episcopal Church, Union has as its chief mission, service to the Appalachian area of Southeastern Kentucky, Eastern Tennessee, and Southwestern Virginia.

With an enrollment of nearly 900 students, including both graduate and undergraduate persons, Union College is committed to excellence in the academic program. The College offers the Bachelor of Arts, the Bachelor of Science, the Master of Arts in Education Degrees, and Rank I Program, along with Associate of Arts Degrees and several one-and two-year programs.

Located on the historic Wilderness Road, Union is the oldest College in this tri-state area. There are now 7,789 graduates with 2,928 having the Master of Arts in Education Degree.

I am glad that you are interested in our program and hope that you will like what you see in these pages. In fact, we hope you like it so much you will join us for many happy and profitable experiences.

Sincerely,

Jack C. Phillips

Jack C. Phillips
President

Career Oriented Programs and Activities

Under Special Programs, beginning on page six, you will find the many ways in which Union will assist you in getting the most out of your college opportunities.

Career Planning, Guidance and Placement, Developmental Studies, Experiential Education, and Prior Learning Credits are some of the programs designed to help you.

You will find learning at Union is not just confined to the campus. There are exciting opportunities off-campus with the Washington Semester, the Kentucky Internship Programs, nuclear studies at Oak Ridge, project AHEAD with the U.S. Army, and the Appalachian Semester.

The latter program is particularly appealing to students of other colleges who come for one semester and then transfer their credits back to their own college. These students testify their Appalachian Semester is a tremendous experience often of profound effect on their lives, for they come to Union to study, work, and learn about people. Especially important has been their interaction with children in Head Start, but they have many other opportunities in the coal mines, in the clinics and social welfare agencies, and, not the least, in the beautiful hollows and forests of the Appalachian mountains themselves.

The college experience of living apart from home and family is a course not found in the curriculum. It is, however, a valuable contribution to learning for it builds self-reliance, and the confidence in oneself necessary to face life on one's own.

Many activities will permit you to exercise your talents, expand your views, or just blow off steam.

There are social clubs, course-related organizations, publications and religious activities to give meaning to your idle hours.

You will enjoy broadening your point of view with those of other areas of this wide world. And they will profit from knowing you.

In matters of social policy, Union College is guided by the Social Creed of the United Methodist Church.

Both men and women participate in a full program of intercollegiate and intramural sports at Union. The college is active in the KIAC (Kentucky Intercollegiate Athletic Conference) and the NAIA (National Association of Intercollegiate Athletics).

The program includes both team and individual sports for all, and everyone is urged to participate.

A History of Service

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as the Classroom Building.

The college was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a *bona fide* college again in the presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the President were built. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. In 1931 Union was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937.

In Conway Boatman's twenty-one years of leadership, the college achieved marked progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

President Jack Carter Phillips began his duties at Union College in January,1983.

Dr. Phillips earned the Bachelor's Degree at Birmingham-Southern College and the Master of Divinity Degree at Vanderbilt University. He received an honorary Doctor of Laws Degree from Union College in 1981. He was cited at that ceremony for "notable achievement in the field of institutional fund raising and, in particular, service to the colleges and universities related to The United Methodist Church."

A native of Scottsboro, Alabama, Dr. Phillips served in the U.S. Marine Corps from 1954 to 1957.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career-oriented curricula.

An Invitation

The doors of Union College are open to all who aspire to a more fulfilling life, without regard to race, color, sex, handicap, national or ethnic origin.

Affiliated with The United Methodist Church, Union is a nonsectarian, co-educational institution with four year undergraduate courses plus a graduate program.

There is an open invitation to all prospective students to arrange a visit to the campus by calling the admissions office (606/546-4151).

SPECIAL PROGRAMS

SPECIAL PROGRAMS

While retaining many traditional values in liberal arts and pre-professional programs, Union College also strives to be unique and innovative in its approach to collegiate education. These special programs offer non-traditional approaches to the earning of credit, avenues of tailoring the student's education to his or her particular needs and interests, and experiences and training in areas not ordinarily found in the small college.

Advanced Placement

Students at Union College who have had superior preparation in certain curricular areas have regularly been placed in advanced course sections. In certain cases credit will be given by an examination administered by the Head of the Department. The college will also grant academic credit to those incoming freshmen who have successfully participated in the Advanced Placement Program of the College Entrance Examination Board. Interested students should consult the publication "Advanced Placement Program" of the College Board Advanced Placement Examinations, Box 592, Princeton, N.J., and their High School Guidance Counselors. Further information on the program may be obtained from the Registrar or the Director of Admissions.

Advanced Placement for Veterans

Academic credit is granted to veterans for advanced placement, in accordance with the American Council on Education. Up to 60 semester hours may be granted, on a combined basis, from College Level Examination Program (CLEP) tests, courses approved by the U.S. Armed Forces Institute, credit from service schools, and correspondence and extension courses. Veterans with over one year of active duty are automatically awarded eight semester hours of elective credit toward graduation.

Project AHEAD

Union College has entered into an agreement with the United States Army to participate in Project AHEAD. Under this project, qualified young men and women may enroll in Union at the same time they enlist in the Army, with the Army paying 75% tuition assistance for college credits earned while on active duty.

For more information on Project AHEAD, contact your nearest Army representative or the Coordinator of Career Planning at Union College.

May Interim Term

During the May Interim term, special projects and courses are offered, both on and off campus. Students may select from certain work-study arrangements, foreign study projects, regular courses, and independent study projects. A student concentrates on one course during this interim term. The May Interim is intended to provide students with unusual and challenging opportunities to broaden and further their education.

College for High School Students

Superior high school students, recommended by their principals, are permitted to take certain college courses in the summer sessions between their junior and senior years in high school. Selected students may also take certain college courses during their senior year in high school. Credit earned in these courses will be officially recorded after the student has been regularly admitted to Union College following his graduation from high school. Special tuition rates are available to such students at 50% of the established summer rate.

Oak Ridge Programs

Union College is a participant in the Oak Ridge Associated Universities Program, a consortium of universities and colleges. This consortium performs many functions, but there is one of special academic significance which provides unusual opportunities for Union College students.

Since 1968, a series of special honors seminars has been conducted at the Oak Ridge (Tenn.) Institute of Nuclear Studies for selected majors in biology, chemistry, and physics and social sciences. These students, under the direction of the Oak Ridge Institute's professional staff, conduct experiments with specialized equipment in the realm of nuclear studies. Arrangements are planned that will provide summer employment at the Institute as research assistants for qualified students of the member colleges.

Appalachian Studies

Reflecting the college's primary mission of improving the quality of life of the Appalachian people, Union is developing a multi-faceted Appalachian Studies Program. One or more components of the program should be of interest to all students. The program seeks to develop an appreciation of the people, culture, and socio-economic conditions of the mountain area; to provide opportunities for direct service, research and personal experience in the region; to provide the skills and critical understanding needed to work in this area; and to help the student develop an understanding of himself and others.

The Program at present consists of the Appalachian Semester and Environmental Studies, each outlined in detail below, and of various academic courses, identified in appropriate departmental and division course listings. The student will find here an interdisciplinary approach to the history, politics, music, natural resources, economics, and other aspects of the society, which will stand him in good stead no matter where he or she may live later.

Appalachian Semester

The Appalachian Semester, which is operated twice yearly during the fall and spring terms, is a unique interdisciplinary academic program in which mature second-semester sophomore, junior and senior students from Union College and other institutions throughout the United States devote their full time to studying the Appalachian region—its strengths, problems and challenges. Students earn a total of fifteen semester hours of academic credit. Nine hours of credit are offered in sociology at the upper division level, and six hours are offered at either the lower or upper division level for field work in a variety of disciplines. Field work may be either experiential learning of a regional nature in a local service agency or other institutional setting, or it may be directed study in the region at large. The program is designed to combine interdisciplinary classroom experiences and on-the-scene community experiences into a "living-learning" situation where total involvement of students and faculty may take place.

Opportunities are provided to discuss with local and regional leaders assets and problems of the region, and field trips are coordinated with seminar discussions in order to involve participants on the spot with current regional issues. Following an orientation of approximately four weeks, students travel into the area and learn through independent study or work in a variety of private and public service settings.

Course descriptions are included in the curriculum section of this catalog. Detailed information and application forms are available from the Coordinator, Appalachian Semester, Union College.

Environmental Studies

Union College conducts a variety of environmental programs for students, teachers and other community leaders focusing on the unique challenges of the Appalachian region as well as questions of current national and global concern. The undergraduate program is supported by an Environmental Studies minor, while the Appalachian environmental workshop offers a unique field work opportunity for teachers and others interested in environmental education. Both levels are complemented by Union's association with the Oak Ridge Associated Universities.

Career Planning, Academic Advising, and Placement Services

Upon admission to Union College, a student will begin a process whereby career planners and faculty advisors assist students to articulate their career goals, to select academic courses of study appropriate to those goals, and to achieve suitable placement upon completion of their studies. A student should therefore be insured of a smooth transition from high school to the academic environment of Union College with the appropriate services available throughout the student's tenure and beyond.

College-Level Examination Program (CLEP)

Union College is a regional testing center for the College-Level Examination Program (CLEP). The CLEP tests provide college credit for material students have mastered through self-study or unaccredited classes. There are five general exams and 30 subject area exams. As an Open Testing Center, Union College administers CLEP exams the second week of each month.

By passing the CLEP examinations, up to 30 semester hours of credit can be earned by degree-seeking students enrolled at Union College toward a four-year program; 15 hours may be earned toward a two-year program. High school special students, and other special students, are not eligible.

Credit may not be earned, through CLEP, for courses required for teacher certification by the Kentucky Department of Education.

Exams in the general battery must be taken before the student achieves sophomore status. Further information is available in the testing center, Room 125-A, Stephenson Hall.

Experiential Education

Certain types of off-campus, work-learning activities are an integral part of various curricula at Union College. These include cooperative education, field work with social and governmental agencies, and independent research. These activities are all exercised under faculty control and supervision during the regular school term and are evaluated in terms of credit toward degree requirements.

These programs are open to Union College students with sophomore or higher rank who are not on probation.

Arrangements for off-campus work-learning experiences must be initiated by the student with the Office of Experiential Education.

Union College's Experiential Education program is approved for the training of veterans and other eligible persons under the provision of Title 38, chapters 34, 35, and 36, U.S. Code.

Individualized Major

Students may elect to develop an individualized major not listed in the catalog. Regular general education requirements must be met and the planned program is developed for a specific reason or goal of the student. The program cannot be used for a waiver of prescribed courses in existing major fields.

The major must be arranged at least one year prior to graduation from Union College and be approved by the appropriate Division Chairman, the Vice President for Academic Affairs, and the Academic Policy Committee.

Kentucky Internship Programs

Union College nominates outstanding Juniors and Seniors as candidates for the Kentucky Administrative Internship Program and the Kentucky Legislative Internship Program. Both programs select interns on the basis of competitive interviews with all Kentucky colleges nominating. Those selected work in a state agency for seven months gaining six to nine hours credit for their project, obtain nine credits for classes taught by state administrators, and earn $436 per month. The program is open to all majors, and Union students have been able to complement their formal campus coursework with regarding experiences working for state agencies in a variety of interesting areas.

Graduate Program in Education

Union College offers a unique graduate program designed for in-service teachers in the public schools. The college grants the 5th year certificate for Kentucky teachers, the M.A. degree in Education in elementary education, general secondary education health, kindergarten education, English social studies, natural science, and a reading specialist program. Post-masters work leading to certification as an elementary or secondary school principal is available. Many courses are offered off-campus.

Qualified holders of the Bachelor's degree should contact the Dean of Graduate Academic Affairs for brochures, catalogs and information about the graduate program.

Unique Majors and Minors

To meet the special needs of students who desire a non-traditional major or minor several special programs have been devised The Associate of Applied Science in Education was designed to serve uncertified teachers in social service programs and for Teacher Aides; the Christian Education major is designed to prepare unordained church workers such as Youth Education Directors the School Social Worker program leads to certification of social work majors for public school application of their skills; the Business-Music major serves those who want to enter the business field while utilizing their skills in music as music store operators or owners; and the Environmental Studies minor serves the broad spectrum of students who have a special interest in ecology and the environment.

Career Ladder Concept

Several of the Union College programs are designed so that the student may interrupt his education after two years of college to enter the world of work, and then return without penalty, for a Bachelor's degree at some later date. Two-year (Associate Degree) programs are available in accounting, computer science, radiologic technology, office administration, medical secretarial administration, vocational education, and elementary education.

Credit for Prior Learning

A program to evaluate and possibly award credit for prior learning experience is available to those whose non-formal education may be of value in their quest for a college degree. Up to 60 semester hours of credit may be awarded toward a bachelor's degree, and up to 30 credit hours may be awarded toward an associate degree. These limits include credits gained through CLEP examinations, challenge examinations, military experience, and the portfolio development class.

Developmental Studies Program

The Developmental Studies Program is designed to help students to become more successful in their college studies. Through this program the college has recognized that each entering student has different strengths and weaknesses. IT IS THE SUM TOTAL OF THESE STRENGTHS AND WEAKNESSES THAT LEADS TO EITHER SUCCESS OR FAILURE IN COLLEGE STUDY. Some of the common weaknesses are reading, writing, and math skills, as well as personal skills such as time management and goal setting.

The College has developed mandatory courses for students who meet one or more of the following criteria:

1. Below 80% on the English Placement Test.
2. Below 85% on the Math Placement Test.
3. Below 10.0 on the Nelson Denny Reading Test.
4. Below 75 on the Coopersmith Self Concept Scale and above 9 on the Norwicki Strickland Locus of Control Scale.

Students are required to take these placement tests before being assigned an advisor and registering for classes. Students who do not meet the criteria for entrance into the mandatory courses may elect to take one or more of the courses that may meet their individual needs after consultation with their academic advisors.

The mandatory courses include the following four courses, each carrying 3 semester hours of credit:

1. **English 110** — Training in college-level language skills. Designed to prepare students for English 111 and other introductory courses. 3 semester hours.

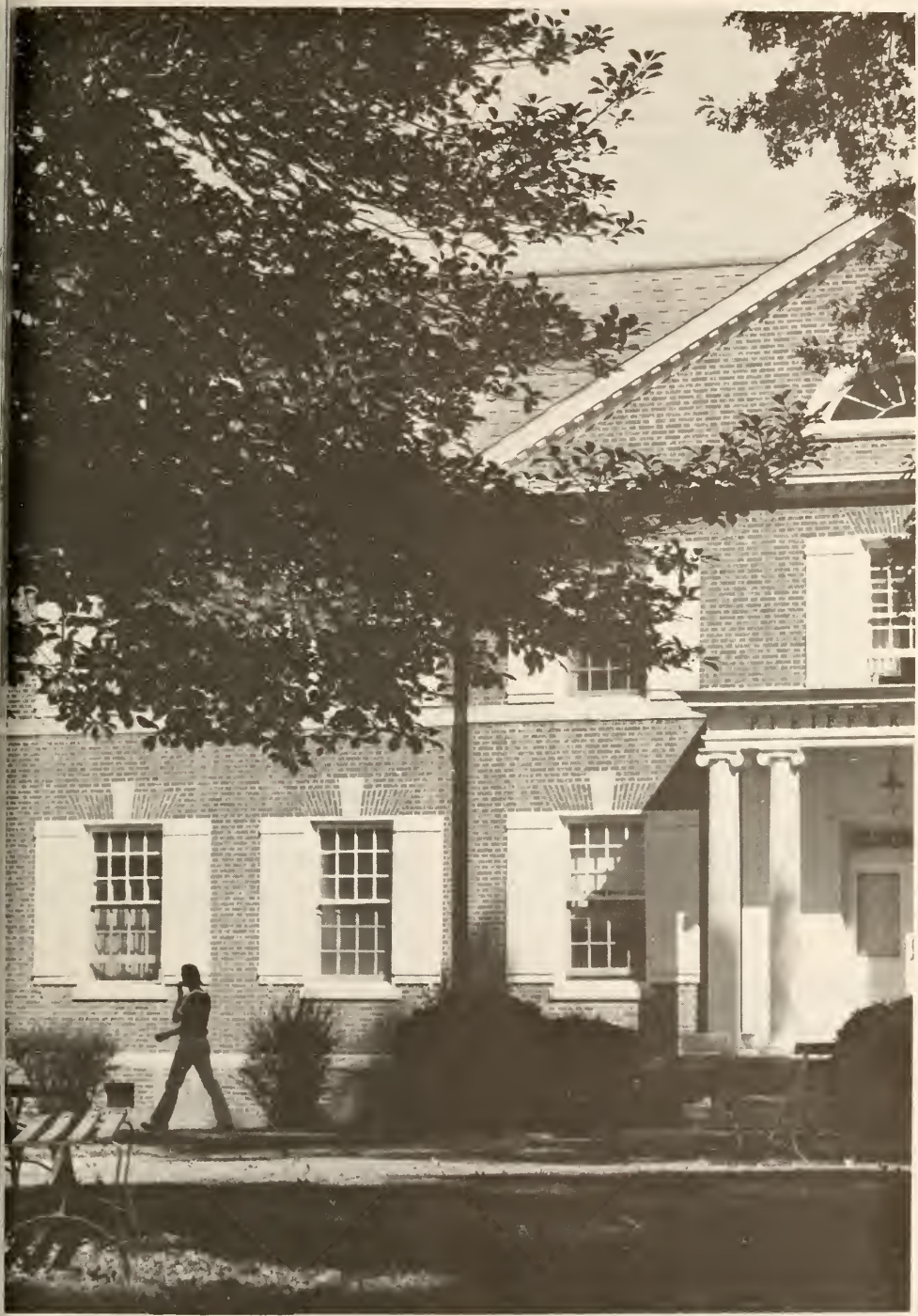
2. **Math 100** — This course includes a review of the real number system and topics selected from the following: logic, graphs, algebraic equations, ratio and percent, probability, exponents and radicals, logarithms, and the definition of trigonometric functions. 3 semester hours.

3. **General Studies 101** — Developmental Reading is designed to help students increase their reading levels to more effectively handle the reading loads required in college. The student's reading level will be evaluated thoroughly to determine the entry level of each student. 3 semester hours.

4. **General Studies 102** — The Seminar: Personal and Career Decision Making is designed to provide students with the necessary support that understands their situation to be a developmental process. It will aid students in their development in areas such as goal setting, life/work planning, values clarification, organizational skills, time management, progress evaluation, knowledge of institutional resources and their use, and positive attitudes toward learning. 3 semester hours.

BALL STRIKE OUT
GUEST HM. HOME

EXTENSION HALL



ADMISSIONS AND GENERAL INFORMATION

ADMISSIONS

The policy of Union College is to admit as regular students only those persons who have either a high school diploma from an accredited high school or a high school equivalency certificate based on the General Educational Development (GED) tests. The college also seeks students who show promise of being able to make positive contributions to the Union College community as shown by letters of recommendation and, when possible, personal interviews.

High school transcripts are carefully reviewed as part of the admissions process. The transcript should include at least 16 units:

3 English
2 Mathematics
2 Social Studies
2 Science
7 Electives
Foreign language is recommended

An applicant who has graduated from a non-accredited high school must establish his ability to pursue a college program before he can be recognized as a candidate for a degree. This must be done by completing at least twenty-four semester hours of residence study with not less than a "C" average.

PROCEDURE FOR ADMISSIONS

Application for Admissions

The application form may be obtained from the Admissions Office, Union College, Barbourville, KY 40906. When submitted, this form must be accompanied by a non-refundable fee of $15.00.

Secondary School Transcript

Each applicant must authorize the release of his/her transcript by signing in the appropriate place on the application form. The Admissions Office will then write to the applicant's high school counselor for the official copy of the transcript.

GED Acceptance

An applicant, not less than 18 years of age, may be admitted on a high school equivalency certificate based on the General Education Development Tests, provided the scores earned are equal to or above the minimum recommended for college entrance by the American Council on Education.

Entrance Tests

All candidates are required to take the Scholastic Aptitude Test (SAT) or the American College Test (ACT) and are expected to have the results forwarded to Union College. The Union College institution number is 5996 for the SAT and 1552 for the ACT.

The application blank for the test and bulletin of information may be received from the secondary school guidance office.

Recommendations

Two recommendations will be obtained by the Admissions Office from the persons named by the applicant on the application form. The applicant must give the full name and address of (1) the applicant's counselor, teacher or other officer of the school, and (2) a teacher, pastor, rabbi, etc.

Health Certificate

The required physical examination form is mailed by the Dean of Students and should be returned to that office as directed.

Personal Interview

An interview is recommended. The Admissions Office at the College is open from 8 a.m. until 4:15 p.m. Monday through Friday, and by appointment from 9 a.m. until 1 p.m. on Saturday during the academic year. If distance is a factor, an interview can be arranged with an alumnus of the college living in the applicant's area.

Admission of Foreign Students

Foreign students must complete the regular admissions process. In addition, a $200.00 admission deposit must accompany the application. After a foreign student is accepted, he must request an I-20 form from the Office of Admissions. Once the student enrolls, the $200.00 admission deposit will be applied toward his tuition.

In order to be considered for admission, a foreign student must score at the 107 level or higher on the ELS English Proficiency and Achievement Report and/or score 500 or higher on the Test of English as a Foreign Language (TOEFL).

When the admission process is completed, a foreign student is obligated to stay at Union for at least one year. No official transcript or recommendation will be released until the student fulfills the year's obligation. If a student leaves before one year, he

must be reported to the Immigration and Naturalization Service. One year is interpreted as two full semesters, excluding summer sessions.

The student must pursue a full course of study. Those who drop to part-time status must by law be reported to the Immigration and Naturalization Service. No visas and/or passports will be renewed until the student's account is paid in full.

Transfer and Advanced Standing

Credits earned from an accredited community college, junior college, senior college, or university can be transferred to Union College, but sixty-seven semester hours is the maximum amount of junior college or community college credit which may be counted toward a degree.

Transfer credits will be accepted at the level of the initiating institution. In case of an appeal for upper division credit when the course was taken at a junior college or as lower division work at a senior college, a committee consisting of the Registrar, the division chairman of the area involving the course, and an appointed faculty member from that discipline will review the content, text, level of work, etc., to determine if upper division credit should be granted.

Union College will record all grades appearing on transcripts of transferring students but will accept for credit only courses transferred from other institutions for which the student has received a grade of C or higher. This policy applies only to credits transferred on a course-by-course basis, not to junior college students who transfer entire degree programs. The student's grade point average will be calculated solely on the basis of grades earned at Union College.

Advanced Placement

Students who have successfully passed one or more of the Advanced Placement tests of the College Entrance Examination Board may ask for advanced placement and credit when they submit their scores for application .The Dean of Faculty will decide on the amount of credit to be granted and the college course that may be omitted. Scores of 3, 4, or 5 are required for such action.

Classification of students

Freshman	less than 32 semester hours
Sophomore	32 semester hours
Junior	64 semester hours
Senior	96 semester hours

COLLEGE EXPENSES

The academic year of nine months is divided into two semesters and a May Interim term. The rates quoted below are for one semester. The cost of a regular session of nine months can be found by multiplying a semester's expenses by two. All checks should be made payable to Union College.

Undergraduate Expenses (per semester)

Tuition (10 to 17 semester hours)*	$1,950.00
Room	250.00
Private Room	325.00
Board (19-meal week)	700.00
Full Time Students	
Activity Fee**	25.00
Total for Boarding Student	2,925.00
Total for Non-Boarding Student***	1,975.00
Part-time tuition for all registration under ten or above seventeen semester hours, per semester hour	75.00

(Undergraduate students over age of 50 pay 50% of the established tuition rate.)

*Each dorm resident is required to purchase a meal ticket for the college cafeteria.

Graduate Expenses

Full-time tuition (10 to 17 semester hours	$1,950.00
Part-time tuition, per semester hour	75.00
Activity ID card (required for boarding graduate students	25.00

For further information see the Graduate Catalog.

---

*Vacation periods are not included in the quotation. Dormitories are closed during intermissions and Christmas holidays. The college reserves the right to entertain delegates to conventions and other related groups in the residence halls during vacation periods. Students will be notified in advance of such contemplated occasions and assurance given regarding the safe-guarding of their personal property during such occupancy. Due to uncertainties in the price of food, the College charges for Board may, if necessary, be changed at any time without notice.

**For Student Activities

***$10.00 of this amount each semester, is designated for Student Center Construction, as voted by students December 10, 1962. $1.00 is collected for Student Senate dues, $1.00 for class dues, and $3.00 for the I.D. card.

Note: Students in special programs which require them to be off campus regularly at meal time may make special arrangements for board through the Vice-President for Academic Affairs.

Summer Session Expenses

Tuition ,Undergraduate, per semester hour $75.00
Graduate, per semester hour 75.00
Tuition ,High School Special, per semester hour 37.50
Room, each term (double occupancy) 65.00
Private Room, each term 85.00
Board—(21-meal week) each term (5 weeks) 225.00
Board—Monday breakfast through Friday lunch (14-meal week) each term 205.00

May Term (1984 - 3 weeks)

The May Term may be considered a part of the spring semester for tuition purposes at the student's option—i.e., the student may restrict his spring load to a maximum of 14 hours and pay no tuition for the May Term . This option is available only to full-time students. The spring load will be determined by the number of hours carried as of February 10, 1984.

Room and Board charges for the May, 1984, Interim will be announced during the spring semester.

Other Expenses (Optional)

The fees listed below are not a part of the traditional tuition and board and room charges.

Application Fee $15.00
Audit Fee, per semester hour 15.00
Late registration fee* 15.00
CLEP —Advanced Tests only (per test) 25.00
College Court Rental, per month (all utilities furnished) 135.00
Examination:
late examination fee 1.00
late final examination fee 5.00
credit by examination (per course) .. 25.00
Foreign Student-Admission Deposit 200.00

*Late registration fee can be waived by the Registrar for sufficient reason if permission is requested in advance.

Note: All board charges are subject to change, pending contract agreement with food service.

Graduation fee for Assoc. Degree or Diploma 25.0
Graduation fee for Bachelor's degree 30.0
Graduation in absentia fee 25.0
Music Preparatory Department; Piano Strings, Wind Instruments
one half-hour lesson, weekly, per semester 100.0
one-hour lesson, weekly, per semester 125.0
Music lessons: part-time and specia students, per semester . . . 75.00 per cr. h
Transcript—after first copy (one week's notice required) 2.0
Student Teaching Fee 100.0

Payment Policy

I. Financial Clearance

A student will be cleared for registratio only if any previous balance has been paic The new semester's account must then b paid in full, or a signed payment plan an first installment completed. Summer schoc and short sessions must be paid in full a the date of registration — no payment pla is permitted for short sessions.

Authorized financial aid will be credite to the student's account except for work study aid, which can only be credited as it i earned. In case the financial aid is an ticipated but not yet authorized, the studen must pay as a first installment one third o the **total** costs.

A student having any unpaid balance wi not be cleared for the release of an officia report of grades, a transcript of credits, or a diploma.

II. Finance Charge

A monthly finance charge of one and half percent (18% annual rate) will be adde to any unpaid balance of a student's ac count during each semester.

III. Payment Plan

If the new semester's account cannot b paid before registration, a payment pla signed by a dependent student and a paren (or by an independent student and spous or cosigner) can be completed and a first in stallment paid down. The payment plan re quires one-third payment on each of th following dates after which the student wi be withdrawn from courses if not paid up:

1. On or before First Semester or Secon Semester registration — One-third
2. Due September 25th (Fall Semester) o

February 25th (Spring Semester — One-third + 1 ½%

3. Due October 25th (Fall Semester) or March 25th (Spring Semester) — One-Third + 1 ½%

4. After November 15th (Fall Semester) or April 15th (Spring Semester) — Student withdrawn from courses.

Refund Information

Since faculty contracts and other commitments are made by the college for the entire year in advance, the following refund schedule has been established in order that the college and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his/her program.

1. There will be no refund given for room rent unless the decision to withdraw is made by the day of registration. This rule applies to all withdrawals including students dismissed from college.
2. Board will be refunded in full amount unused to the date of withdrawal. A full week is charged for any fraction of a week.
3. Tuition will be refunded on the following basis:

REGULAR SEMESTER—Twenty per cent of the total for tuition will be charged for each of the first five weeks. No refunds will be made on tuition after the fifth week. Any part of a week will be treated as a full week. Refund is based on tuition charges, less $10 student center allocation, $1 class dues, and $1 student senate fee.

SHORT TERMS—Fifty percent of total tuition will be charged the first week and fifty per cent the second week. No refunds following the second week. Any part of a week will be treated as a full week.

4. Any registrant who has completed registration and who has failed to attend a single class may have his account credited for the money paid, this to apply for use on future registration within a twelve-month period.
5. **Room Reservation Deposits** — This deposit will be refunded if the request is made in writing not later than August 1 for the fall semester or thirty days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request with the Dean of Students at least 30 days before the end of the term for cancellation of the contract. This deposit will be refunded within 60 days upon receipt of written authorization by the Dean of Students indicating the depositor is no longer enrolled as a student at Union College and that he/she has left the housing facility undamaged and does not owe other bills. The request for this authorization must be made within one year after the end of the academic term for which the student was enrolled.
6. Questions regarding refunds may be addressed to the Dean of Students or appealed to the Vice President for Student Affairs.

A student is considered to be enrolled until he/she formally notifies the Office of the Registrar of his withdrawal and all refunds will be based on the date of notification.

FINANCIAL ASSISTANCE

Student expenses. In planning to attend Union College a student should expect the following typical expenses for an academic year: tuition and general fees $3,950, room $500, board $1,400, books and supplies $250. In addition, allowances should be added to these figures for personal expenses, medical insurance, transportation, and extra charges for special curriculums such as laboratory fees, etc.). The Office of Student Financial Aid will consider the total costs for attendance, including the items listed above, when making a financial aid commitment.

Purpose of financial aid program. In addition to its own scholarship funds, Union College participates in all federal programs including the Pell Grant Porgram. Residents of Kentucky are also eligible to receive state tuition grants and loans. Information on Union College scholarships will be found on following pages.

Students applying for financial aid are considered for all programs for which they are eligible. The amount of financial aid awarded is generally a combination of grant, loan, and employment, and is based on the financial need of the student. Need is determined by subtracting the resources of the student and his or her parents' contribution

from the total student expenses. The parents' contribution is estimated on the basis of the amount of their income and assets as well as a consideration of taxes, medical expenses, and other liabilities of the family. An independent, objective, nationally recognized method of analysis developed by the College Scholarship Service is used to evaluate the family's financial circumstances. All financial aid awards to students are determined by Union College's Office of Student Financial Aid.

Procedures for applying for financial aid. Students must apply for financial aid by submitting a Financial Aid Form (FAF) to the College Scholarship Service. Students applying by March 15 will have a greater opportunity. However, financial aid will still be available after this date. The FAF is used to apply for the Pell Grant, the Kentucky Tuition Grant, the Supplemental Educational Opportunity Grant (SEOG), College Work-Study, National Direct Student Loan (NDSL) and any institutional funds. The FAF may be obtained from a high school guidance office or the office of Student Financial Aid. Students should specify 1825 as the code number for Union College in the appropriate section of the FAF.

A letter explaining the award decision and giving information about any aid offered will be sent from Union College to each student who applies.

Procedures for re-applying for financial aid. A student must reapply for financial aid each academic year. However, aid usually continues at the same level each year, unless a student's resources or his or her expected parents' contribution changes. All enrolled students receiving aid automatically receive information about applying for renewal awards. Other enrolled students should request applications by February 15.

In order to continue to receive financial aid a student must be making satisfactory progress toward his/her degree. A student may be said to be making satisfactory progress during a first semester on academic probation. However, he/she is not considered to be making satisfactory progress should he/she be continued on academic probation for a second consecutive semester, or fails to complete 50% of the courses for which he/she enrolls in any one semester. The maximum number of semesters for which financial aid may be received is ten.

Grants

Pell Grant—A program providing direct grants from the federal government. The student receives an eligibility report (as a result of his or her Financial Aid Form application) which can be submitted to Union College for payment. It is expected that the maximum amount for the Pell Grant will be $1800.

Supplementary Educational Opportunity Grant (SEOG)—A program designed by the federal government to assist students with exceptional financial need. The grant is permitted in a range from $200 to $2000 per year for students who demonstrate academic potential.

Kentucky Tuition Grants—The program provides grants to students who are residents of the Commonwealth of Kentucky and who demonstrate a need through the analysis of the Financial Aid Form application.

Employment

College Work-Study Program—If a student has a remaining need to meet college costs after the federal and state grants are awarded, the student will be awarded an amount to be earned on an hourly basis in campus department. This employment program is campus-based support from the federal government. Either undergraduate or graduate students can qualify if the Financial Aid Form results indicate a need.

Work-Grant—If a student cannot qualify for employment on the basis of financial need and the college needs the special skills of a student, the student can work for an amount of tuition waiver.

Loans

National Direct Student Loan—Federal loan funds are made available to students who have financial need and who maintain satisfactory progress toward graduation. A Congressional change in the regulations on July 1, 1981, requires that repayment begin six months after graduation or withdrawal from school at a 5% interest rate.

KHEAA Guaranteed Student Loan Program—This loan program exists in Kentucky and other states as a way to borrow from private commercial lenders to finance college education on the undergraduate and graduate levels. Repayment at 9% interest begins 6 months after graduation or withdrawal. Minimum payments are $50.00 a month. Eligibility depends upon at least half-time enrollment status, a "C" average for undergraduate students, and a reporting of family income. The loans are insured by the state.

United Methodist Student Loan Fund—Students who are members of the

United Methodist Church and maintain a "C" average may apply through Union College for a loan at 6% interest from the Board of Education of the United Methodist Church.

Elizabeth L. Gates Loan Fund—Mrs. Waldo Brown, of Knoxville, Tennessee, has established a loan fund in memory of the mother of Mr. John B. Gates, a former student at Union College. The resources of this fund are available to senior male students preparing for the ministry.

Charles M. and Mary D. Grant Loan Fund—The Charles M. and Mary D. Grant Foundation has provided an endowment loan fund for Appalachian students who demonstrate a real need and who are in good standing at the College.

Dr. Eugene T. Gray Loan Fund—Dr. Eugene T. Gray, of St. Petersburg, Florida, has established this fund to aid worthy and needy students.

Hensley Emergency Loan Fund—Mr. and Mrs. Burton F. Hensley have established a loan fund for single students at Union College who have emergency situations requiring small short-term loans.

The Rev. and Mrs. Erwin King Loan Fund—The Rev. and Mrs. Erwin King have established a loan fund to aid worthy ministerial students in the junior or senior year at Union College.

Guy H. Williams Loan Fund—Dr. Guy H. Williams, of Cleveland, Ohio, has established a loan fund in memory of his wife, Anna Williams. The fund is available to worthy students who have spent two years at Union College and have a "C" average or better.

Knox County Chamber of Commerce Student Loan Fund—Mr. William S. Murphy, former director of development at Union College, provided the initial gift to establish the fund as an expression of appreciation for the contribution of Union College to the educational, economic, social, and religious life of Knox County and vicinity. The Knox County Chamber of Commerce attempts to make annual contributions to this fund, and encourages local citizens to do likewise.

The Charles Henry and Glennora Romger Krieger Student Loan Fund—This loan fund, established by the late Glennora R. Krieger, of Ft. Thomas, Kentucky, provides loans to worthy and needy students from the Appalachian counties of Eastern Kentucky. The terms of the loan are the same as those of The United Methodist Student Loan Fund.

Other Loan Funds—Student loans are available from a number of funds not specifically designated for Union College students, but for which Union College students are eligible. Specific information may be obtained from the Office of Financial Aid.

Loan-Grants

Ministerial Loan-Grant—Ministerial loan-grants amounting to $400 for the academic year are available to students studying for the ministry. To be eligible for this aid the student must have a license to preach, or enroll in the non-credit religion course, Conference Studies, which is designed to prepare candidates for obtaining the license to preach. Renewal of the loan-grant depends on the student's successfully passing this course and obtaining the license to preach before the beginning of the next academic year. Applicants qualified for the loan-grant must sign a note for the amount received each semester. These notes will be cancelled after the individual has entered into the full-time ministry. If the student changes his plans and enters another field of endeavor the notes become due and payable.

Loan-grants amounting to $700 for the academic year are available to United Methodist Local Preachers who agree to serve four years in the Kentucky or Louisville Annual Conference. These notes will be cancelled after the specified service has been fulfilled.

United Methodist Church Grants-in-Aid—Union College will provide grants of $400 for full-time United Methodist students and will request the student's home church to match the grant. If the student plans to go into the Methodist ministry or if the student is a dependent of a Methodist minister, then a $500 grant will be provided by the college. In each case, a request will be made to the local church to match the grant.

The grants are for one year, renewable, and may be applied to any Union College charges (tuition, fees, room and board on campus). A student is eligible for only one of the above grants.

College Employee Scholarships—Full-time employees of Union College are eligible for tuition remission scholarships. Their spouses and/or unmarried dependent children may receive one-half tuition scholarships. A tuition grant at other colleges participating in the Tuition Exchange Program is also available to employees' unmarried dependent children.

Full-time employees hired after January 1, 1975, will not be eligible for tuition scholarships for spouse or children until they have been employed for six months unless they are under annual contract. Dependent children are not given employee scholar-

ships for graduate work. Eligible persons must apply at the Business Office at least one week prior to registration.

Assistantships

Senior Assistantships are made available annually in the academic divisions. The assistantships are open to students of outstanding scholastic ability who exhibit great promise of future usefulness and who are considering graduate studies with a view of entering college teaching. The duties of the Senior Assistants include occasional classroom lectures, research, remedial work with beginning students, assisting in laboratories, etc. The Assistants are expected to spend a minimum of twelve hours per week on the work assigned. The awards are made by the Scholarship Committee upon recommendation from the Division Chairmen. Senior Assistants receive a stipend of $600 per year.

Scholarships

A student who qualifies for scholarship assistance on a merit basis may be entitled to more than one of the following scholarships, in any one academic year. The total amount of scholarship and other financial aid cannot exceed 100% of the annual college costs.

Valedictorians and Salutatorians are awarded $2,500 and $2,000 respectively. Students in the top 10% of their graduating class are awarded $500. Evidence of high school rank must accompany the transcript, certified by the high school attended. These scholarships are renewable every year of the student's undergraduate program (total of 4 years) at $1,000/yr. if a minimum cumulative grade point average of 3.5 is maintained, or at $700 for a 3.0 minimum average.

Academic Scholarships based on ACT/SAT scores are available as shown in the chart below. These scholarships are renewable for succeeding years at the original amount if the student maintains a minimum cumulative grade point average of 3.5, or at two-thirds of the original amount for a 3.0 minimum average.

ACADEMIC SCHOLARSHIP CHART

ACT Scores	SAT Scores	Award
20	900	$600
21	950	$700
22	1000	$800
23	1050	$900
24	1100	$1,000
25	1150	$1,200
26	1200	$1,400
27	1250	$1,600
28	1300	$1,800
29 and up	1350 and up	$2,000

Junior College Scholarships in the amount of $500 are awarded to graduates of junior or senior colleges who have earned the A.A. or A.S. degree with a G.P.A. of at least 2.5 on a 4.0 scale. These scholarships are renewable in the senior year at $500 if the student maintains this average, or increases to $600 if the student increases his grade point average to 3.0

Alumni Scholarships—The Alumni Association of Union College awards two scholarships annually on the basis of character, need, and evidence of future usefulness. Each scholarship is for $500. Recipients are selected by the Alumni Scholarship Committee.

The George L. Bagby Scholarship/Loan Fund—The late Mr. George L. Bagby, of Woodford County, Kentucky, established a student financial aid endowment totaling $405,000 including accumulated interest and this supports both scholarships and loans for Kentucky students.

Bank of Harlan Scholarships—A number of scholarships are given annually to qualified students from Harlan County by the Bank of Harlan. The grants are determined according to financial need and academic excellence.

Barbourville Kiwanis Scholarship—The Kiwanis Club of Barbourville, Kentucky, has supplemented an educational fund originated by Mr. C.F. Hedrick and established a scholarship fund at Union College for promising students from Knox County, Kentucky.

Barbourville United Methodist Church Music Scholarships—Annually the First United Methodist Church of Barbourville, Kentucky, awards four scholarships to music students amounting to $200 for a total of $800. Consideration is given for participation in the music program of the local church.

Bell County Scholarship—A friend of Union College from Bell County, Kentucky has established a scholarship endowment with the income to be awarded annually to a Bell County student. This grant may vary with the income from the investment but will be approximately $300 per semester.

Henry C. Black Memorial Scholarship—This scholarship of $250 is given as a memorial to Mr. Henry C. Black, a graduate of Union College, to a freshman graduating from a high school in Kentucky or Tennessee.

John A. and Hannah P. Black Memorial Scholarships for Christian Workers—The late Dr. and Mrs. Henry C. Black, of Johnson City, Tennessee, endowed a scholarship that provides an annual grant of $500 for a promising student who plans a life of service in The United Methodist Church.

Dr. and Mrs. James F. Blair Scholarship—Dr. and Mrs. James F. Blair, of Barbourville, Kentucky, have endowed two $300 scholarships for students from Knox County, Kentucky. They are awarded annually to students in the sophomore, junior or senior year.

The Daniel Boone Festival Cherokee Scholarship—The Daniel Boone Festival of Barbourville has established an annual $500 scholarship to a Cherokee student from the Qualla Reservation, Cherokee, N.C.

The Eulalia Serrano Cabrero Memorial Scholarship—Miss Carmen Cabrero, '64, Jacksonville, Florida, has established a scholarship in memory of Eulalia Serrano Cabrero, a 1964 graduate of Union College. The scholarship will pay $100 per year, and is made available to a needy student of minority background interested in a service profession.

W.S. and Bess Carpenter Scholarship—Mr. and Mrs. W.S. Carpenter, of London, Kentucky, provide annually a scholarship for a worthy freshman, preferably from southeastern Kentucky. The grant varies with need, but is in the $500-$700 range.

Dr. and Mrs. Carlo B. Cawood Memorial Scholarship—The late Dr. and Mrs. Carlo B. Cawood, of Harlan, Kentucky, have endowed a scholarship to be awarded to a Harlan County student with preference being given to a student from the Harlan United Methodist Church. The Scholarship may be renewed. The grant is $700 per year.

Mamie D. Chambers Endowment Fund—The late Mamie D. Chambers, of Maysville, Ky., has established an endowment fund, the income from which is used to help support grants to needy and deserving students.

The Davies Memorial Scholarship—The family and friends of Miss Ellen Davies and Dr. T.R. Davies have endowed an $800 scholarship to be awarded annually to a freshman or to an upperclassman with a "B" standing from Bell, Clay, Harlan, Knox, Laurel or Whitley County.

Dr. Robert M. Drew Endowment Fund—The Commission of Missions of the Hyde Park Community United Methodist Church, Cincinnati, has established an endowment fund in honor of the Rev. Dr. Robert E. Drew. This fund will be used for scholarship grants for foreign students.

Dr. Franklin Duncombe Memorial Fund—Mrs. Helen Duncombe, of Haverford, Pa., has established an endowment fund in memory of her late husband. Income will be used to finance grants-in-aid for students planning to enter the United Methodist ministry.

Alfred I. DuPont Scholarship Fund—The late Mrs. Alfred I. DuPont, of Wilmington, Delaware, has established scholarships to needy students having high academic potential. Preference is given to students from the Appalachian counties of Kentucky and Appalachian region in adjoining states.

E. Nettie Edinger Memorial Scholarship—The late Mr. Joseph Edinger endowed this scholarship in memory of his sister. The scholarship is awarded annually to a deserving and worthy student enrolled at Union College.

Dr. and Mrs. J. Edward Faulkner Memorial Scholarship—This $300 scholarship is awarded to a student who plans a life of service in the healing arts, with preference being given to a predental student.

W. Glover Giles Memorial Fund—The late Mr. W. Glover Giles, of Louisville, Ky., a trustee of Union College, established an endowment fund by gifts during his lifetime and by a bequest. Income is used to fund Honor Scholarships at Union College.

John O. and Harriet B. Gross Memorial Scholarship—Family and friends have endowed a scholarship. Dr. Gross was president of Union College during the years 1929-1938. The scholarship is awarded annually to Kentucky senior students with preference being given to Northern Kentucky. The stipend and requirements are the same as for "United Methodist Scholarships."

Hugh and Joyce Haggard Memorial Scholarship—A scholarship fund memorializing Dr. Hugh E. and Joyce A. Haggard, and their children, Walter M. and Stephanie L., has been established by the parents and brother of Dr. Hugh E. Haggard. Income from the fund provides an annual scholarship for a full-time student at Union College. The $500 scholarship will be awarded to a worthy student on the basis of financial need.

Dewey and Rachel B. Hendrix Memorial Endowment—Dwight M. Hendrix, an alumnus of Union College, and his sister, Mrs. Mary Katherine Hendrix Brashear, of Hyden, Leslie County, Kentucky, have established an endowment to memorialize their parents. The endowment is designated for financial aid with the income to assist needy and qualified students enrolled full-time. Students who are residents of Leslie County, Kentucky, should be given preference. Should no one qualify, then the grants are to

be given to student(s) from the Appalachian Region of Kentucky.

Walter S. and Ida Cole Hudson Scholarship Fund—The late Ida Cole Hudson, of Barbourville, an alumna of Union College, through a bequest, has endowed a fund to provide scholarships to students from Knox County, Kentucky.

Irene Hughes Scholarship—Miss Irene Hughes (AB '37; MA '63), Barbourville, Kentucky, provides an annual scholarship of $250 for a freshman girl, a graduate of Knox Central High School, who has been a member of the High School Honors English Class and who exemplifies Christian principles of conduct. The scholarship will be awarded by the Alumni Scholarship Committee.

Professor and Mrs. Millard L. Jordan Scholarship—Professor and Mrs. Millard L. Jordan, of Lakewood, Ohio, have established a scholarship fund at Union College to aid worthy Appalachian students.

Junior Study Club Scholarship—The Junior Study Club of Barbourville, Kentucky, provides a $200 scholarship to aid worthy students from Knox County, Kentucky. The scholarship is awarded to a girl who graduated from a high school in Knox County who is a junior or senior at Union College.

Kentucky River Coal Corporation Scholarship—A scholarship endowment has been established by the Kentucky River Coal Corporation, Lexington, Kentucky, for needy students from Knott, Leslie, Letcher, and Perry Counties, Kentucky. Recipients must have a grade point average of at least 2.0 during their senior year in high school, or must have or maintain a grade point average of at least 2.5 at Union College.

Jeffrey W. Kronk Memorial Scholarship—Mr. and Mrs. Walter F. Kronk, of Huntsburg, Ohio, have endowed a scholarship for a needy, qualified student for Geauga, Lake, or Ashtabula counties in Ohio, or from the Appalachian counties of Southeastern Kentucky. The scholarship is in memory of their son, Jeffrey, who was enrolled at Union College from 1963 through 1967. Should there be no qualified students from these areas in any given year, the endowment income will be used to support the Lincoln-Civil War Collection at Union College.

Verna Noe Landrum Memorial Scholarship—Mr. John W. Landrum, of Harrodsburg, Kentucky, has established a $500 annual scholarship in memory of his mother, Mrs. Verna Noe Landrum, at Union College. The award is to go to a student from Harlan County.

W.B. Landrum Memorial Scholarship—Mr. John W. Landrum, of Harrodsburg, Kentucky, provides annually a scholarship of $500 in memory of his father for a promising United Methodist ministerial student. The student benefited by this scholarship must exhibit outstanding personal attitudes of religious sincerity, devotion, and earnestness in purpose.

London Laundry Scholarship—The London Laundry & Dry Cleaners, London, Kentucky, has established an annual $300 scholarship to assist a student graduating from a high school in Southeastern Kentucky during his freshman year at Union College.

Dorothy Lucas Memorial Fund—An endowment fund has been established in memory of Miss Dorothy Lucas, registrar of Union College for many years and beloved friend of students. The income from the fund is used to support various student-aid activities of the college.

The Magee Christian Education Foundation awards annually a scholarship for students entering Christian vocations or professions or to those of economic need who are of Christian commitment.

Gayle Miles Scholarship—An endowed scholarship has been established by friends and former students of the late Gayle Miles for students from Barbourville High School. The late Miss Miles taught at both Barbourville Elementary School and Union College.

John and Minnie B. McGaffee Trust Fund—Dr. and Mrs. O.J. Wilson, of Bowling Green, Kentucky, have established the John and Minnie B. McGaffee Trust Fund for the purpose of providing financial assistance to worthy and needy preministerial students. The income may be used for grants or loans, with preference being given to students from the Appalachian Region of Kentucky.

National United Methodist Scholarships—The Board of Education of The United Methodist Church makes available annually several United Methodist Scholarships of $500 grants. The awards are made on the basis of character, need, and scholastic ability. Only students having at least a "B" average are eligible.

Mr. and Mrs. Hiram H. Owens Memorial Scholarship—Mrs. Sampson B. Knuckles (Jean) and Mrs. Buford T. Clark (Eleanor) have endowed a scholarship for a Knox County student in memory of their parents, Mr. and Mrs. Hiram H. Owens. Mr. Owens was a well-known lawyer and Mrs. Owens (Georgia Black) was the daughter of James D. Black, a governor of Kentucky and a president of Union College.

Emory Evan Peter Memorial Endowment—he late Mrs. Laura P. Dickey, of Louisville, entucky, established an endowment fund n memory of her brother, Emory Evan Peter. he income from this fund will be used to elp finance the college student-aid pro-ram.

E.O. Robinson Mountain Fund Scholar-hips—The E.O. Robinson Mountain Fund as established an annual scholarship pro-ram to assist needy students who reside in ıe Appalachian Region of Eastern Ken-ıcky. Students receiving these scholarships ıould give promise of being able to com-ete their academic work successfully. They ıould be and remain unmarried while ceiving assistance from this scholarship. ualified persons should apply to the Office Financial Aid.

Kyle and Sue Rosenbalm Scholarship—r. and Mrs. Kyle Rosenbalm, Ewing, rginia, provide a scholarship of $200 an-ıally for a student from southwestern rginia.

Donald Rankin Memorial Scholarship—iends of Donald Rankin, a Union College udent killed in Vietnam, have provided a holarship that pays $100 annually for a ung man from Kentucky. Basis for award-g the scholarship is need and the earnest sire for a college education.

Sanders Honor Scholarships—Colonel arland Sanders, of Shelbyville, Ky., has pro-ded a number of honor scholarships an-ıally. Mrs. Claudia Sanders, his widow, ntinues to provide them. The Sanders ıor Scholarships are limited to students ıo do not use tobacco and alcoholic verages.

The Charlotte R. Schmidlapp Fund of Cin-ınati, Ohio, has established a loan-holarship fund for single women students her from the Appalachia area or Greater ncinnati. The students are asked to repay e loan.

Lewis Ogden Stiles Endowment Fund—e late Mrs. Lewis Ogden Stiles, of Waco, xas, established this fund to memorialize r late husband, Lewis Ogden Stiles, and first wife, Pearl Long Stiles, both faithful ited Methodists of Irvington, Kentucky. e income from this fund will be used to ance grants-in-aid under the college loan-ınt program to United Methodist students nning to enter the ministry of the Ken-ky or Louisville Annual Conference.

ns Scholarship Fund—Reverend and Mrs. rry C. Sims, of West View, Kentucky, have ablished a scholarship fund at Union lege to aid worthy students preparing for United Methodist ministry.

The Catherine Faulkner Singer Memorial Scholarship—This $350 scholarship has been established by friends, alumni, and her daughter and son—Marcia and Donald—for the son or daughter of an alumnus of Union College. The honoree was Director of Alumni Affairs from 1961 to 1978.

Cawood Smith Harlan County Scholarship—Mr. Cawood Smith, Harlan County attorney, has established an endowment for a scholarship to be awarded to the son or daughter of a miner from Harlan County, Kentucky. The recipient shall be a resident of Harlan County and selected upon the basis of need, scholarship, and promise of future usefulness to the coal region. The grant shall be $2,000.

The Walter B. and Geraldine G. Sutton Memorial Scholarship—An annual scholarship will be given to a Knox County student attending Union College. The selection will be determined by the student's need, academic ability, and promise of future usefulness. The endowment is provided by his two daughters: Carla Sutton Combs and Lynn Sutton Prichard.

Lytle and Dorothy Swope Scholarship—Dr. Samuel G. Swope of Louisville, Kentucky, a trustee of Union College, and F. William Swope, of Elizabethtown, Kentucky, have established a scholarship endowment as a memorial to their parents. Funds for the endowment came from their parents' estate. Up to four scholarships are awarded annually with grants of $750.00 each. Preference is given to students born in Kentucky, Ohio, or Florida.

Hulbert Taft, Jr., Memorial Scholarship—Mrs. Thomas C. Haydock, Sr., of Cincinnati, Ohio, has provided a scholarship endowment as a memorial to her late husband, Hulbert Taft, Jr. The income from the endowment will be used annually to provide one or more honor scholarships to needy students having high academic potential.

Edward Townsend Memorial Scholarship—Mr. Milton H. Townsend has endowed a scholarship with preference being given to a history and political science major. The grant is in memory of Mr. Townsend's late father.

Allan Tuggle Scholarships—Allan Tuggle, M.D., of Charlotte, N.C., an alumnus of Union College, has established a number of scholarships in mathematics and physics.

Several of the scholarships are awarded to entering freshmen on the basis of a competitive examination. Other scholarships are awarded to current students with majors/minors in mathematics or physics on the basis of academic achievement. Some of

the scholarships may be in the form of work grants.

Union National Bank Scholarship—The Union National Bank of Barbourville, Kentucky, has established a half-tuition scholarship at Union College to aid worthy students from Knox County, Kentucky. It is awarded to a student graduating from a high school in Knox County, for the freshman year at Union College.

Harry V. Viall Memorial Scholarship—Mrs. Harry C. Viall, of Barbourville, Kentucky, has endowed a memorial scholarship for a needy, qualified student with preference going to an individual from Knox County. The annual $1,000 scholarship is given in memory of her late husband, Harry, who was a prominent local businessman.

Mr. and Mrs. O.H. Viall Memorial Scholarships—The family of Mr. and Mrs. O.H. Viall, of Barbourville, Kentucky, have established a memorial scholarship fund at Union to aid worthy students. The number and size of the scholarships vary according to student financial need.

The Robert E. and Ann Viall Endowed Scholarships—Mr. and Mrs. Robert E. Viall, of Barbourville, Kentucky, have established endowed scholarships that provides $4,000 annually for worthy students from either Knox or Bell County.

William M. Wilson Memorial Scholarship—The late Mrs. Eva Oldfield Wilson, of Barbourville, Kentucky, established a scholarship fund in memory of her late husband. The income from the fund will be used to provide an annual grant of $350 for a promising student preparing to teach in the elementary or secondary schools.

Dr. Henry M. Zimmerman Scholarship—The late Dr. Henry M. Zimmerman, of Pompano Beach, Florida, established a scholarship endowment, for needy students of exemplary character who show promise of being able to contribute to the well-being of their country and their fellowman.

Endowments

The Russell M. Bennett Memorial Professor of Sociology Chair—This chair was given to Union College by Mrs. Helen Hunt Bennett in the amount of $75,000 for the endowment of this professorship in 1946. An additional $2,000 was given for the equipment of the Business Department.

Andrew and Emma Elizabeth Edinger Memorial Fund—This fund was established by the late Mr. Joseph Edinger in memory of his mother and father. The fund has been increased by other members of the family and the income designated for use in t maintenance of campus buildings.

James P. Faulkner Memorial Endowme —James P. Faulkner, of Barbourville, Uni College president from 1897 to 1905, ga property to the college the sale of which pr duced $57,500. The income from this inve ment is used to assist with salary support f a faculty member in philosophy.

Anna E. and John William Harris Memor Fund—The late Dr. J. William Har established a lectureship fund containi the sum of $30,000 in memory of his sist Anna E. Harris, and his father, John Willia Harris.

Charles and Leona Jennings Memor Funds—Dr. Charles M. Jennings, of Mari ta, Georgia, has established an endowm fund in memory of his parents, Charles a Leona Jennings, the income from which is be used to provide an annual bonus to head of the Department of Biology at Un College.

William Jones Endowment Fund— William Jones, of Barbourville, Kentuc has established a fund, which may augmented from time to time, the inco from which is designated for use by School of Music to purchase recordings a musical scores.

Jeffrey Kronk Memorial Endowmen This endowment, established by the Ser Class of 1967, in memory of Jeffrey Kron member of that class, will assist in purch ing books for Union College's Lincoln-C War Collection.

Francis Landrum Memorial Professor Religion and Philosophy—The late M Obed H. Wilson established the Fran Landrum memorial professorship throug bequest of $50,000 in 1927.

Melanie Jean Martin Trust Fund—Dr. Mrs. O.J. Wilson, of Bowling Green, K tucky, have established a memorial fun memory of their granddaughter. The inco from the fund is used to purchase lib books to support the work of the Eng Department.

Pearl Sinnett Meyer Memorial Fund— Rev. Dr. Jesse I. Meyer has establishe endowment fund in memory of his wife, Pearl Sinnett Meyer. The income from fund is designated for the purchase of bo for the Union College library.

Allan Tuggle Endowment Fund—A Tuggle, M.D., of Charlotte, N.C., an alum of Union College, has established a f which may be augmented from time to t the income from which is designated scholarships, awards, and instructional port in mathematics and physics.

Willson-Gross Lectures—The late Dr. and Irs. James Willson, of Floydada, Texas, stablished a lectureship endowment in emory of Dr. and Mrs. John Owen Gross. he purpose of the lectures is to bring anually to the campus distinguished speakers discuss vital issues confronting the Chrisan student.

Colutha J. Taylor Wright Memorial Fund—he late Mr. J.S. Wright, of Whitley City, Kenicky, established an endowment fund in emory of his wife, Mrs. Colutha J. Taylor 'right. The initial sum was $1,000.

wards

ote: Some of the following awards are ademic in nature; to be eligible for such vards, students' academic records should t include any incompletes.

The Annie Velma and Edward S. Amis vard is to be presented on Honors Day to a l-time Christian Service student who is aking satisfactory progress toward a gree.

Alpha Psi Omega Award (National amatics Honor Fraternity); an Oscar to the ident who has contributed most toward ma at Union College, as selected by mbers of the Fraternity.

Senior Biology Award, by Dr. Theodore R. vies, to the senior student showing the hest academic excellence in the field of logy.

Governor James D. Black Award, by the e Pitzer D. Black, to the senior with the hest scholastic average for the year.

Blackwell Memorial Award in Political ence, by the late Dr. Robert Lee Blackwell nemory of his mother, Mrs. Victoria Wolfe ckwell, to the senior majoring in history l/or political science showing the highest demic excellence in the field of political ence.

rwin S. Bradley History Award to an upclass student with a major in history and or in political science who has the hest scholastic average in overall grades istory earned at Union College.

athy Brick Memorial Award, by her nts, Mr. and Mrs. Theodore F. Brick, ton, Ohio, to the student showing the iest proficiency in competitive swimg.

ampus Ministry Award in recognition of senior who, though active in campus stry, also exemplifies and acts out ner faith in the care and nurture of rs, in the selfless giving of his/her time talents, and in the continuous expression of love he/she shares with all persons. This award is given to the person who combines education and vital piety, academics and the practice of faithful living.

The Chemistry Department Awards, in General Chemistry, Analytical Chemistry, Organic Chemistry, and Physical Chemistry. The award is given to the student who has completed the year course with the best all-around average. Awards are furnished by the Chemistry Department faculty.

The Daniel Drinkard Memorial Award, by students of Union College and friends, to the runner-up for the Athlete of the Year, the athlete who exemplifies the characteristics of desire, kindness, honesty, and personal integrity, as embodied in his personality and attitude.

Eastern Kentucky Essay Awrd, by the late Dr. Kenneth H. Tuggle, trustee of Union College, to the student writing the best essay on Eastern Kentucky history. A resident of Barbourville, Dr. Tuggle had been Lt. Governor of Kentucky and a member of the Interstate Commerce Commission.

Bjornstad Freshman Composition Award, by Dr. and Mrs. William B. Bjornstad, formerly of the faculty of Union College, to the student achieving highest writing excellence in freshman composition courses as determined by the English Department.

Gamma Beta Phi Award, a book, to the full-time student with the highest cumulative average in hours earned in Union College.

Dr. L.A. Geiss Award to the graduating senior majoring in business with the highest cumulative standing in that field.

Dr. L.A. Geiss Award to the junior majoring in Accounting with the highest cumulative standing in that field.

Dr. Albert D. Graham, Jr. Social Studies Award, is presented to the senior majoring in an area of social studies who shows the greatest teaching potential in social studies, as selected by the Department of Education.

Governor James D. Black Award, by the late Pitzer D. Black, to the senior with the highest scholastic average for the year.

Iota Sigma Nu Awards to the freshman and the sophomore students with the highest scholastic average in their respective classes for the year.

The H.B. Jones Business Enterprise Award, in memory of H.B. Jones, an attorney in Pineville and Louisville, Kentucky, whose business interests included coal mining, railroading, and construction. The $50 award is given to a student who has shown initiative and enterprise in the field of business.

The Steve Jones Memorial Award to the senior Varsity Letterman with the highest cumulative academic average. The endowment is sponsored by former athletes and friends.

Literature Award, by the Tuesday Club of Barbourville, Kentucky, to the senior majoring in English who shows the greatest excellence in the field of literature.

Samuel A. Matthews Memorial Award, a book given by Robert D. Matthews to an upperclass preministerial student whose life and work show the promise of Rev. S.A. Matthews' 50-year ministry in the Southern Illinois Conference of the Methodist Church.

Rena Milliken Award, by the Business Department Faculty, to the student showing the greatest potential for future achievement in the field of Business.

Dr. Paul Muncy Memorial Award, to the senior premedical student with the highest cumulative academic standing.

The Music Faculty Award, to a student majoring in music, for interest, initiative, cooperation, musical ability, academics, and service to the department.

Student National Education Association Award, given by the John Owen Gross chapter to the graduating senior showing the greatest excellence in the field of education.

H.H. Owens History Award, by Mrs. H.H. Owens, to the student showing the greatest excellence in the field of history.

The Laws and Esten Parks Award, by Mr. S. Laws Parks, former vice president for business affairs of Union College, and Mrs. Parks, presented annually to the preministerial senior with the highest cumulative academic standing.

The Physical Education Faculty Award to the man and woman senior majors with the highest cumulative academic standing.

The Physics Award, by the Physics Faculty, to the student showing the greatest excellence in general physics.

President's Award by President Mahlon A. Miller to the senior who has the highest cumulative record in grades earned at Union College.

Sampson Political Science Award, by the late Governor Flem D. Sampson, to the junior showing the highest academic excellence in the field of political science.

The Hattie Stanberry Ecology Award honors an alumnus and former faculty member. The $50 stipend is given to the student or organization that has made a contribution to environmental improvement in the academic year. If no candidate, the sum shall go for the College's Soccer Club, or, i none, it shall go to the Annual Fund.

The Thomas Storrar Memorial Award Scholarship—This annual cash award c scholarship is to be given to a student o Honors Day who exemplifies the honesty concern, and personal commitment to th Union College community which wa displayed by the late Mr. Tom Storrar, wh was employed by the ARA Food Services a Union College. Circle-K Fraternity has in itiated this fund.

Katherine V. Sutphen Memorial Award, b the Alumni Association of Union College, t the music student who has used his talent best during the year in serving Union Co lege.

Theta Pi Delta Award presented on Honor Day by Stespean/Orange and Black Staffs t the senior who represents the qualities c outstanding service as exhibited by D Frances Patridge during her years of loya service.

Judge W.W. Tinsley Family Memorial Award, by the late Mrs. Mayo Tinsle Rathfon, to the junior or senior preparing fo a legal career showing the greatest promis for future success.

The Natural Sciences Awards, four i number, are presented at Honors Convoc tion to students majoring in the natur sciences who have attained academ distinction as defined by criteria establishe by the faculty of the Division of Natur Sciences.

Beverly P. and Mossie B. Wilson Memori Award in English, by Dr. and Mrs. O. Wilson, to the student majoring in Englis with the highest cumulative grade poi standing who has completed three full yea of residence at Union College.

Beverly P. and Mossie B. Wilson Tru Fund—Dr. and Mrs. O.J. Wilson, of Bowlin Green, Kentucky, have established memorial fund in memory of Dr. Wilson mother and father. The first $100 incom from the fund shall be used to support th annual "Beverly P. and Mossie B. Wilso Memorial Award in English." Income in e cess of $100 shall be used for a revolvir loan fund for students majoring in Englis

Dr. Cecil H. Wilson Jr. Award to the juni with the highest scholastic average for th year. Dr. Wilson is publisher of the Barbou ville Mountain Advocate newspaper.

John Henry Wilson Award, given memory of Mr. John Henry Wilson, form member of Congress from Barbourville, t his granddaughter, Mrs. Guy D. Attkisso Jr., of St. Petersburg Beach, Florida, to th sophomore from the Fifth Congression

District of Kentucky who has the highest scholastic average for the year.

Student Load

The normal undergraduate student load is sixteen semester hours per semester. Students who have an average academic standing may register for a maximum of eighteen semester hours credit per semester. Students who attain a "B" average are permitted to earn up to twenty-one semester hours per semester. Exceptions must be approved by the Division Chairman of the student's major.

The May Interim may be considered as part of the Spring Semester for tuition purposes at the student's option—i.e., the student may restrict his Spring load to a maximum of 14 hours and pay no tuition for the May term. This option is available only to full-time students.

The maximum load in each summer term is generally six semester hours. Students whose cumulative grade point average is "B" or better may request permission from the Division Chairman to take seven hours a term.

Class Attendance

Class attendance is required. Each student is responsible for all work from the first day of class and is expected to attend all meetings of the class for which he is registered. This is regarded as a matter of individual student responsibility.

All faculty members are expected to keep accurate records of class attendance.

Class absences due to circumstances beyond the control of the student will be excused by the teacher involved if request is made within one week of return to the campus. Class work or tests in these classes must be made up.

Classwork and tests missed due to illness of the student can be made up only when the student presents the teacher with a valid excuse when he returns to class.

Class work and tests missed by a student while he is participating in an activity sponsored by Union College may be made up only when the faculty sponsor of such an activity signs the official absence list of students.

A student is not automatically withdrawn when he stops attending a class. Official withdrawals are made only on forms provided by the Registrar's Office. It is the student's responsibility to complete this form, obtain the signatures needed, and return it to the Registrar's Office.

Examinations and Reports of Marks

Examinations are held at the close of each semester. Tests are held at such times during each semester as the instructors may determine. Mid-semester and semester grades are reported by the instructors to the Registrar. Mid-semester grades are mailed to students' advisors as soon as possible, and students are urged to obtain these grades from their advisors. Where permission to mail grades to parents has been given, grades of students receiving a grade of D or F at mid-semester will be mailed to home addresses ten days after classes resume following the mid-semester break. Copies of final, semester grades are given to students and, where permission has been granted, mailed to parents. Only final grades become a part of a student's permanent record.

Credit/Fail System

Students may take two courses per academic year (June through May) on a Credit/Fail basis. Only two courses may be taken in a single discipline. A student must apply in the Registrar's Office for the Credit/Fail Option no later than the Friday following mid-term. When the instructor turns in a letter grade at the end of the semester, a "D" or above will be recorded as "Credit." This option encourages students to take courses they otherwise might not attempt and where they fear the grade might lower their grade point average. The semester hours earned by "Credit" count, but no quality points are earned. Once this option is chosen, it may not be changed.

Quality Point Standing

The quality point standing of a student is determined by dividing the total quality points which he has earned by the total number of semester hours for which he has registered minus the number of hours of Cr and Incomplete on his record.

Honor Students

Union College recognizes excellent scholarship in three ways: the Dean's List, the Presidential Laureates, and graduation with honors.

The Dean's List is comprised of those students completing at least 12 hours of graded work with a 3.00 grade point average for the semester, no incompletes, and at least a 2.50 cumulative grade point average. This list is published after the fall and spring semesters.

Presidential Laureates are those students who meet all requirements for the Dean's List and achieve at least a 3.75 grade point average for two successive semesters with at least 12 hours of graded work, and no incompletes, in each semester. The two summer sessions may be counted as one of these semesters if the minimum hours have been earned. The list of students designated as Presidential Laureates is published after the fall and spring semesters.

Appropriate certificates are given in recognition of both of these achievements, and graduation honors are noted on the diplomas of those receiving degrees with distinction (described on page 29 of this catalog).

Probation

Students falling below the following grade point average will be placed on Academic Probation:

Freshmen	1.80
Sophomores	1.90
Juniors	2.00
Seniors	2.00

Probationary students are closely monitored by the Academic Standing Committee of the college. Continuation of probation for more than two semesters may result in limitations of credit carried, being required to repeat courses in which low grades were earned, loss of Union College financial aid, or suspension from the college.

Suspension

Union College will not accept any credits earned at another institution while a student is under academic or disciplinary suspension from Union College.

The Marking System and Quality Points

Marks are reported in letters as follows:

A— Represents distinctly superior work valued at four quality points for each semester hour.

B— Represents above average work, valued at three quality points for each semester hour.

C— Represents average work, valued at two quality points for each semester hour.

Cr— Indicates that a course has been passed satisfactorily.

D— Represents inferior but passing work valued at one quality point.

F— Indicates failure with 0 credits and quality points for each semester hour.

W— Indicates that a student withdrew during the first 12 weeks of the semester.

I— Indicates that in the opinion of the instructor the student has not been able to complete the required work of the course on time dur to unavoidable circumstances.

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolled for that term. If the student is not enrolled, the "I" must be removed before the end of the 12-month period following the date on which the "I" was received. Any exceptions to the time limit must be made by agreement of the instructor, division chairman, and registrar. If an "I" is not removed within that time limit it remains on the permanent record and cannot be made up.

A student who does not take final examinations at the end of a semester will be given temporary registration in the next semester within the time allowed for registration. All final examinations for courses which are prerequisit to courses in which the student may be enrolled the next semester must be taken by the end of the registration period. Failure in any of these prerequisite courses will cancel the student's enrollment in the advanced course.

Proficiency Examinations

1. The student will apply for credit by examination at the Office of Experiential Learning and Community Services. An initial screening interview will be conducted and the division chairperson and appropriate faculty member will be consulted to determine if an evaluation seems feasible.

If an evaluation is feasible, the student will take a completed application form to the faculty member and arrange for an evaluation date. The faculty member will prepare an evaluation procedure, carry out the evaluation, and report the results to the Office for Experiential Learning and Community Services.

Reported results will include a recommendation as to whether or not credit should be awarded and a description of the evaluation procedure and student performance. This material will be maintained on file in the Office for Experiential Learning and Community Services.

The recommendation and evaluation description will be forwarded to the division chairperson or a designated representative for review. If the division representative does not concur, the faculty member, designated representative (if there is one), and the division chairperson will meet with the Director of the Office for Experiential Learning and Community Services to seek a resolution.

Successful completion of a challenge examination will be reported to the Registrar by the office director and will be recorded as "Credit" on the transcript. An unsuccessful challenge will not be recorded.

Students enrolled in a course may request a challenge examination only within the period when a new course may be added.

Challenge examinations may not be used for developmental courses, to repeat a course, or remove an "F" from the transcript.

xtension and orrespondence

Any student planning to graduate from ion College must receive permission from e Registrar to register for correspondence extension courses. Credits cannot be corded unless prior arrangements are ade.

Students enrolled for a full-time program study shall defer work on all correspondence and extension courses during e term for which they are registered.

Not more than twelve semester hours of rrespondence or extension work done in e academic year will be accepted by the llege. Not more than one-fourth of the urses in a major may be completed by exsion. Not more than thirty-two semester urs of extension and correspondence edit will be accepted toward a degree.

Not more than six semester hours extension or correspondence may be accepted during the senior year. Students with sixty semester hours or fewer at Union may offer six semester hours non-residence in the last thirty-six; students with sixty-one semester hours or more may offer six semester hours out of the last twenty-four.

Failures or quality point deficiencies in any course done in residence cannot be removed by extension or correspondence work.

Graduating seniors must complete any correspondence work needed for graduation at least three weeks before the date of Commencement.

Graduation Requirements

Requirements for Graduation—Bachelor of Arts Degree and Bachelor of Science Degree.

The candidates must satisfy the following requirements:

1. Minimum of 128 semester hours. Thirty of the last thirty-six must be earned in residence at Union College. Students who have earned as many as sixty-one semester hours at Union College may graduate with only eighteen of the last twenty-four hours earned in residence. At least forty semester hours must be in courses numbered 300 and above.
2. Quality point standing of 2.00 overall and at Union, and in all courses taken in the major or minor fields.
3. Completion of the following **General Requirements:**
   - I. English 111-112, 6 hours
   - II. Humanities, 18 semester hours:
     Approved courses in art; drama and speech; music; foreign language; religion; philosophy; English language and literature (other than English 355).
   - III. Social Science, 9 semester hours
     History; political science; psychology; sociology; economics; geography.
   - IV. Natural Sciences, 8 semester hours
     Biology; chemistry; mathematics; physics; general science; environmental science. (see Teacher Education requirements for teacher certification requirements).

V. a. In II and III no more than six hours may be taken in any one discipline. In IV all eight hours may be taken in one discipline (except for teacher education students).

b. Hours taken for a first major may not be counted toward the Group Requirements.

c. Students taking a 48-semester-hour area may count the area hours toward the Group Requirements.

VI. Courses meeting humanities requirements are marked (H) in the course description section. Those meeting social science requirements are marked (SS) and those meeting science requirements are marked (NS).

4. The equivalent of 12 semester hours of a single foreign language not native to the student is required for the Bachelor of Arts Degree. Six of these hours may be applied toward the Humanities general requirement. Equivalency shall be determined by the successful completion of the fourth college course of the language. Students with prior training in that language at the high school level may be eligible for advanced placement in the sequence of courses and meet the requirement with less than twelve credit hours.

Religion majors may substitute a year of Hebrew and a year of Greek for the language requirement for the Bachelor of Arts degree.

5. For the Bachelor of Science degree the student must meet all graduation requirements, including a major or area. A foreign language may or may not be required as determined by the individual discipline.

6. Completion of either:

a. A major as determined by the faculty of the individual discipline.

Majors are offered in Accounting; Biology; Business Administration; Business Education; Drama and Speech; Elementary Education; English; Health Education; History; Mathematics; Music; Physical Education; Psychology; Religion; Secondary Education; Social Work; Sociology.

Minors are offered in Accountin Art; Biology; Business Administr tion; Chemistry; Computer Scienc Drama and Speech; Economic English; Environmental Scienc Health Education; Histor Mathematics; Music; Office A ministration; Philosophy; Physic Psychology; Religion; Sociology.

b. An area, the structure of which determined by the faculty of the Di sion in which the area requiremen are met.

Areas are offered in Business; En lish; Music-Business, and Science.

7. At least forty semester hours offered f graduation must be earned in junior ar senior courses (300 and above); at lea six semester hours 300 and above, earne at Union, must be included in any min at least nine semester hours 300 ar above, earned at Union, must be include in any twenty-four hour major; at lea twelve semester hours 300 and abo (evenly distributed in the two fields if th is a combined major), earned at Unio must be included in a thirty-hour major; least eighteen semester hours 300 ar above. earned at Union, must be includ in an area.

8. At registration each senior must speci the tentative date on which he expects graduate.

9. Advice in arranging schedules and choo ing courses is always given glad however, each student is responsible f completing all requirements.

Combined Degrees

The bachelor degrees may be granted students who have completed three years work at Union College and one year of wo in an accredited professional school, wi the following provisions:

1. The work in the professional scho must continue the curriculum in which th student has been enrolled at Union Colleg (pre-law, pre-dentistry, pre-medicine, etc.).

2. The student must have complete satisfactorily the minimum requirements f three years of pre-professional work at Unio College (ninety-six semester hours with quality-point standing of at least 2.00) ar also the general college requirements f graduation, including the foreign languag requirement if a B.A. is desired.

3. The student must have completed atisfactorily the minimum requirements for ne year of study at the accredited profes- ional school in which he is enrolled. The umber of credits at the end of the four years f study must total at least 128 semester ours.

egrees With Distinction

onors in scholarship are recorded on the plomas of the students earning them, and ublished in the Commencement program. here are three grades of honors designated spectively: *cum laude, magna cum laude,* nd *summa cum laude.* These honors are nferred at graduation upon students who tisfy the following conditions of scholar- ip:

The honor of *cum laude* is awarded to ose students who have earned an average anding of 3.0 (B) overall and at Union.

The honor of *magna cum laude* is awarded those students who have earned an erage standing of 3.5 overall and at Union.

The honor of *summa cum laude* is award- to those students who have earned an erage standing of 3.8 overall and at Union.

Students coming from other colleges may ceive general honors on completing 61 mester hours of resident study and satis- ng the conditions of scholarship prescrib- by the faculty, provided they furnish also ch evidence of high scholarship in the in- tution from which they come as may, in judgment of the faculty, entitle them to come candidates for honors under the ulations.

As a reward for excellence in scholarship d to promote diligence in study and en- urage high ideals, the honorary scholastic ternity of Iota Sigma Nu was founded on y 26, 1936. Membership is open upon elec- n to:

All who have met the requirements for graduation with honors.

All students who have at least 74 hours with a 3.2 quality point standing or 100 hours with a 3.0 quality point standing and who have completed a minimum of two years in residence at Union College.

anned Curriculum

he beginning of the junior year, a planned iculum will be developed by the Division irman at the student's request. This is a ting agreement between the college and dent. Once the curriculum has been com- ed only changes approved by the Regis- are binding on the college.

Academic Amnesty

Students who have received a Grade Point Average of less than 2.0 in a semester may apply to the Registrar for Academic Amnesty for that semester after having completed two consecutive semesters with a minimum GPA of 2.0. A student who has received any form of Academic Amnesty at another institution shall not be eligible for Academic Amnesty at Union College. Any student who meets these criteria will be granted amnesty. When amnesty is granted, grades below a "C" received in that semester will remain a matter of record but will no longer be counted as part of the Student's Grade Point Average. The student will be given credit for courses with grades of "C" or higher received in that semester, but these grades will not be included in the Student's GPA. A student may receive Academic Amnesty only once at Union College, and it may apply to only one semester, or two consecutive terms in one summer. Students who receive amnesty will not be eligible for academic honors based on cumulative GPA.

Students who have been out of school for one semester or two years may be readmitted on a conditional basis and apply for Academic Amnesty after completing two consecutive semesters of satisfactory (2.0) work. Students who have been out of school more than two years will be treated as transfer students.

CURRICULUM

MAJORS AND DEGREE PROGRAMS

A college major is actually a means to an end—the means by which a student prepares for a future career, entrance into graduate school, or some change in his life style. Union College offers a wide range of majors and minors, as part of the Bachelor degree and a number of certificate ar 2-year Associate degree programs for thos not needing a full 4-year degree.

DEGREE AREA	BA/BS Major	BA/BS Minor	Assoc. Degree	Cert.
Accounting	•	•	•	
Business Administration	•	•	•	
Business Education	•			
Office Administration	•	•	•	•
Computer Science		•	•	
Medical Secretarial			•	
Music/Business	•			
Economics		•		
Elementary Education	•		•	
Secondary Education	•			
Vocational Education			•	
Health Education	•	•		
Physical Education	•	•		
Drama and Speech	•	•		
Drama	•	•		
Music	•	•		
English	•	•		
Pre-Ministry	•			
Religion	•	•		
Christian Education	•			
Philosophy		•		
Psychology	•	•		
Sociology	•	•		
Social Work	•	•		
Pre-Law	•			
History	•	•		
Appalachian Studies		•		
Appalachian Semester				•
Biology	•	•		
Science	•			
Pre-Medicine	•			
Pre-Engineering	•			
Pre-Optometry	•			
Pre-Pharmacy	•			
Pre-Physical Therapy	•			
Pre-Veterinary Medicine	•			
Pre-Dentistry	•			
Medical Technology	•			
Environmental Studies		•		
Chemistry	•	•		
Mathematics	•	•		
Physics	•	•		
Radiologic Technology			•	
Coal Mining Technology		•	•	

Undecided Majors

Students who have not made a vocational or professional choice will be assigned an advisor in the Career Counseling Office. Those who plan a general program leading to a professional degree program at a university not requiring a bachelor's degree for admissions should confer carefully with their academic advisors and schedule that program from the general education courses of the college.

Course Numbering System

Courses numbered 100 or 200 are intended primarily for lower division students and 300 and 400 level courses are generally reserved for upperclassmen. Freshmen or Sophomores desiring to enter 300 or 400 level courses should confer with the division chairman involved for permission to enroll. 500 level courses are restricted to graduate students.

Courses with hyphenated numbers (101-102) are used when the first semester is prerequisite to the second.

Interdepartmental Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used in any department although they are not shown in the following pages under the specific listings.

001-099	Non-credit special interest courses.
1,281,381, 1,581	"Special Topics" courses—classes developed on a one-time or experimental basis, or a special innovative class.
2,482,582	Special workshops, credit or non-credit.
3,482,583	Television courses through Kentucky Education Television Network
4,284,384 4	May interim courses not listed under a regular catalog number.
5,485	Experiential Education—internships, cooperative work experience and vocational work experience.
7,487	Field Practicums in specialized areas.
5,595	Independent Study—individual research on approved topics not found in traditional courses. May be repeated on different topics.

Special Notations

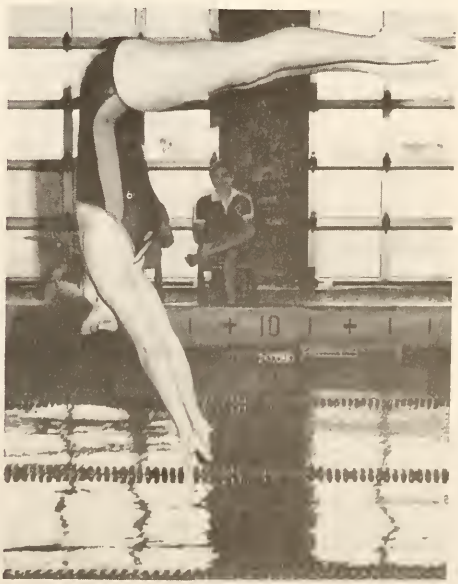
Each course description indicates the semester the course will be offered—(F) for Fall Semester, (S) for Spring Semester, and (Sum) for Summer Session.

Many regular year courses are offered in summer sessions but are not guaranteed offerings.

Courses indicated as being offered in "Even Years Only" are offered on an alternate year basis in academic years *beginning* with even numbers, as 1978-79—"Odd Years Only" courses are offered on an alternate year basis in academic years *beginning* with odd numbers, as 1979-80.

Courses marked (H) meet general college requirements in humanities; those marked (NS) meet the requirements in natural science; and those marked (SS) meet the requirements in Social Science.

Students should consult regularly with their advisors to insure proper progress toward their degree. During the Junior year, a final planned curriculum is prepared which constitutes a contract for the courses remaining to be completed in order to earn the degree. It is the student's responsibility to initiate the process of developing the planned curriculum.



Division of Applied Science

Paul S. Moore, *Chairman*
Department of Business and Economics Department of Education
Department of Health & Physical Education

1. DEPARTMENT OF BUSINESS AND ECONOMICS

Allen Engle, *Acting Department Head*
Accounting—Business Administration—Business Education
Computer Science—Economics—Office Administration

BACHELOR OF SCIENCE DEGREES IN BUSINESS

In addition to the general college requirements, all candidates for the Bachelor's degree must complete the following courses and one of the major fields listed below:

Common Courses Required of All Candidates

		Semester Hours
BUAD 321	Principles of Marketing	3
BUAD 351	Principles of Finance	3
BUAD 352	Principles of Management	3
BUAD 311 or 312	Business Law	3
ACTG 271, 272	Principles of Accounting	6
COMP 131	Introduction to Computer Information Systems	3
ECON 153, 154	Principles of Economics	6
		27

Accounting Major

		Semester Hours
ACTG 371, 372	Intermediate Accounting	6
ACTG 331	Cost Accounting	3
ACTG 376	Tax Accounting	3
ACTG 471	Advanced Accounting	3
ACTG 430	Accounting Theory	3
ACTG 433	Auditing	3
BUAD 311 or 312	Business Law (Complimentary three hours)	3
OFAD 302	Business Communications	3
	Choice of Computer Language (COBOL or RPG)	3
		30

Business Administration Major

		Semester Hours
BUAD 372	Personnel Management	3
MATH 211	Statistics	3
BUAD 451	Business Policy	3
OFAD 302	Business Communication	3
	Choice of Computer Language	3
	Electives from the Department of Business and Economics	12
		27

Office Administration

		Semester Hours
BUED 152	Business Mathematics	3
OFAD 112	Intermediate Typewriting	3
OFAD 211	Advanced Typewriting	3
OFAD 121, 122	Elementary and Intermediate Shorthand	6
OFAD 301	Business English	3
OFAD 302	Business Communication	3
OFAD 361	Office Management	3
	Elective from the Department of Business and Economics	3
		27

Business and Music Major

		Semester Hours
BUAD 272	Salesmanship	3
OFAD 302	Business Communication	3
	Upper division business elective	3
	Field Placement	3-10
MUSC 161-162	Foundations of Music	8
MUSC 261-262	Harmony	6
MUSC 111-412	Applied Music	16
MUSC 322	Music History	3
MUSC 161, 176	String, piano, woodwind, or brass class (Choice of any 3)	3
		48-55

Business Education Major (see Education Department for Certification requirements).

		Semester Hours
Teaching Major in Basic Business		
ACTG 271, 272	Principles of Accounting	6
OFAD 302	Business Communication	3
BUAD 311 or 312	Business Law	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153 or 154	Principles of Economics	3
BUED 331	Office Practice or Office Internship	3
OFAD 121, 122	Typewriting	6
BUAD 352	Principles of Management	3
BUED 362	Methods of Teaching Basic Business Subjects	3
		33

Teaching Major in Secretarial Skills

ACTG 271 or 272	Principles of Accounting	3
OFAD 302	Business Communication	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153 or 154	Principles of Economics	3
BUED 331	Office Practice or Office Internship	3
OFAD 121, 122	Elementary and Intermediate Shorthand	6
OFAD 112, 211	Elementary and Intermediate Typewriting	6
	Business Elective	3
BUED 361	Methods of Teaching Secretarial Business Subjects (title change)	3
		33

For endorsements in other business subjects, see the head of the business or education department.

ASSOCIATE OF APPLIED SCIENCE DEGREES IN BUSINESS

The following two-year programs lead to the award of the A.A.S. degrees in the emphasis indicated. Union College provides a "career ladder" approach to learning in that students who complete these degrees may immediately apply the credits earned on the two-year degree toward a Bachelor's degree, or return to college later with the guarantee that the credits previously earned at Union will apply toward the 4-year degree.

Common Courses Required of All Candidates

		Semester Hours
ENGL 111	Freshman Composition	3
ENGL 112	Freshman Composition	3
BUED 152	Business Math	3
ECON 153	Principles of Economics I	3
COMP 131	Introduction to Computer Information Systems	3
OFAD 302	Business Communications	3
ACTG 271	Principles of Accounting I	3
	Humanities General Requirement	9
	Social Science General Requirement	3
		33

Accounting Emphasis (AAS)

		Semester Hour
ACTG 272	Principles of Accounting II	3
BUAD 311 or 312	Business Law I or II	3
ECON 154	Principles of Economics II	3
MATH 211	Statistics	3
	Accounting Electives	9
	Natural Science General Requirement	4
	Free Electives	6
		31

Business Administration Emphasis (AAS)

		Semester Hour
ACTG 272	Principles of Accounting II	3
BUAD 311 or 312	Business Law I or II	3
ECON 154	Principles of Economics II	3
OFAD 111	Typewriting I (or equivalent)	3
	Natural Science General Requirement	4
	Business Electives	9
	Free (non-Business) Electives	6
		31

Computer Science Major Emphasis (AAS)

		Semester Hou
ACTG 272	Principles of Accounting II	3
COMP 321	Application of Programming	3
COMP 331	Systems Analysis	3
ECON 154	Principles of Economics II	3
	Computer Languages	6
MATH 211	Statistics	3
MATH 111	Algebra & Trigonometry	4
OFAD 111	Typewriting (or Equivalent)	3
	Internship and/or Free Electives	3
		31

Medical Secretarial Administration Emphasis (AAS)

		Semester Hou
BIOL 151	Medical Terminology	2
BIOL 340	Anatomy & Physiology	4
BUED 331	Office Practice	4

HLTH 131	First Aid & Safety	3
HLTH 270	Personal & Community Health	3
OFAD 111, 112	Beginning & Intermediate Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
OFAD 301	Business English	3
		31

Office Administration Emphasis (AAS)

		Semester Hours
UED 331	Office Practice	4
OFAD 111, 112	Beginning & Intermediate Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
OFAD 301	Business English	3
	Natural Science General Requirement	4
	Free Electives	8
		31

Diploma in Office Administration (One-Year Program)

		Semester Hours
NGL 111	Freshman Composition	3
OFAD 111, 112	Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
JAD 151	Introduction to Business	3
OFAD 301	Business English	
OFAD 302	Business Communications	3
JED 331	Office Practice	4
CTG 271	Principles of Accounting I	3
	Elective	4
		32

MINORS AVAILABLE TO ALL STUDENTS

Accounting—Twenty-one semester hours in Accounting.

Business Administration—Accounting 271-272, Business Administration 311 and 352, Computer Science 131, Economics 153, and three hours of Business electives.

Computer Science—Accounting 271-272 and fifteen hours in Computer Science.

Economics—Twenty-one semester hours consisting of the following: Economics 153, 154, ; Mathematics 211; Business Education 353; Business Administration 351; and History 241 or onomics 251.

Office Administration—Twenty-one semester hours including Office Administration 112, 122, , 301, Business Education 331, and six hours of Office Administration electives.

ACCOUNTING

Accounting 271-272. Principles of Accounting (F,S) (3-3)
Procedures in journalizing, posting, financial statements, and adjusting and closing entries, controlling accounts, and the voucher system. *Prerequisite:* Business Education 152.

Accounting 290. Payroll Accounting. (S) (3)
The Social Security Act and other laws relating to the payment of wages and salaries, the preparation of State and Federal tax returns, and the use of data processing in payroll accounting.

Accounting 371-372. Intermediate Accounting. (F,S) (3-3)
Financial statements, working capital, investments, plant and equipment, stockholders' equity, analytical processes. *Prerequisite:* Accounting 272.

Accounting 331. Cost Accounting. (F) (3)
Methods of assembling cost data for materials, labor, and overhead consumed in a manufacturing enterprise. *Prerequisite:* Accounting 272.

Accounting 376. Tax Accounting. (S) (3
Problems of accounting for all types of federal, state, and local taxes. *Prerequisite:* Account ing 272.

Accounting 471. Advanced Accounting. (F) (3
Accounting for partnerships, joint ventures, installment sales, consignments, home office and branch units, consolidated income statements, balance sheets, and retained earnings statements. *Prerequisite:* Accounting 372.

Accounting 430. Accounting Theory. (F) (3
This course will be a readings course in accounting literature including publications of the American Institute of Certified Public Accountants, the Financial Accounting Standards Board, the Securities and Exchange Commission, and court cases involving legal liability. *Prerequisites:* Accounting 372 and Senior Status.

Accounting 433. Auditing (S) (3
Verification, analysis and interpretation of accounting records. *Prerequisite:* Accounting 43

BUSINESS ADMINISTRATION

Business Administration 151. Introduction to Business (F) (3
Forms of business ownership, marketing, personnel management, finance, and governmen regulations.

Business Administration 272. Salesmanship. (S) (
The interpretation of sales techniques and methods, prospective customers, interview sales presentation, demonstration, closing the sale.

Business Administration 311-312. Business Law. (F-S) (3-
Laws dealing with contracts, agency, employment, bailment, transportation, real and pe sonal property, leases, and bankruptcy.

Business Administration 321. Principles of Marketing. (F) (
Study of the movement of goods from producer to consumer and an examination of the fun tions of the marketing process, marketing, institutions, channels of distribution, leg aspects, and policy consideration.

Business Administration 351. Principles of Finance. (F) (
Basic principles of finance including monetary and credit systems, the demand for funds the capital market, factors affecting the study of funds, and monetary and credit policie *Prerequisites:* Accounting 221 and Economics 154.

Business Administration 352. Principles of Management. (F)
The development of organization plans and policies, development of industrial relation management operation with emphasis on skills and techniques of leadership.

Business Administration 371. Insurance. (S)
Insurance contracts and the fields of insurance including fire, marine, casualty, soci disability, life, and property. (Odd years only).

Business Administration 372. Personnel Management. (S)
Supervision of employees, policies relating to effective utilization of human resources business concerns. *Prerequisite:* Business Administration 352.

Business Administration 404. Investments. (S)
Public and Corporate securities, security markets, investment policies and tax problem (even years only).

Business Administration 451. Business Policy. (S)
Analysis of management problems, formulation of alternative courses of action, determi tion of policy decisions. *Prerequisite:* Senior status, and successful completion of Busine Administration 321, 351, 352, and 372.

BUSINESS EDUCATION

Business Education 152. Business Mathematics. (F,S
Fundamental processes involving percentage, interest, discount, payroll taxes, and finan statements; includes the use of office calculating machines.

Business Education 281. Special Topics. (on demand

Business Education 331. Office Practice (S
The development of office proficiency. Laboratory required. *Prerequisite:* Office Adminis tion 121.

usiness Education 353. Consumer Economics. (S) (3)
The role of the consumer in handling his or her money.

usiness Education 361. Methods of Teaching Secretarial Subjects. (on demand) (3)
Methods, materials, and techniques used in the teaching of bookkeeping, typewriting, shorthand, and general business subjects.

OMPUTER SCIENCE

mputer Science 131. Introduction to Computer Information Systems. (F) (3)
Survey of the basic computer concepts, hardware, and operations; introduction of basic programming concepts and documentation standards used in various programs.

mputer Science 231. BASIC Programming. (F) (3)
A study of the BASIC programming language including problem definition, flow charting, solution of problems that are adaptable to business and/or science, and hands-on experience on the mini-computer. *Prerequisites:* Mathematics 111 or Accounting 272, and Computer Science 131.

mputer Science 233. FORTRAN Programming. (F) (3)
A study of the FORTRAN IV programming language on the computer including evaluation, flow charting, and solution of problems that are adaptable to business and/or science. *Prerequisites:* Mathematics 111 or Accounting 272, and Computer Science 131.

mputer Science 235. RPG Programming. (S) (3)
A study of the RPG programming language on the computer. The class is oriented toward problems and reports with business applications.

mputer Science 237. COBOL Programming. (S) (3)
A study of COBOL, a high-level programming language which is adaptable to most business applications of any magnitude. (Even years only). *Prerequisites:* Mathematics 111 or Accounting 222, and Computer Science 131.

mputer Science 321. Application of Programming. (S) (3)
To improve the student's ability to build, maintain and use data files. To use magnetic media, systems software, and become more proficient in one of the programming languages. *Prerequisite:* A programming language.

mputer Science 331. Systems Analysis. (F) (3)
A study in the analysis and organization of a system which can be adapted to a complete practical application. Student must be able to utilize concepts learned in the related computer science courses to accomplish this. (Even years only). *Prerequisite:* Approval of instructor.

CONOMICS

nomics 153-154. Principles of Economics. (F,S) (3-3)
Elementary economic theory of prices, national income, production, and employment.

nomics 251. Environmental Economics. (S) (3)
Societal choice in the use of scarce resources is related to ecosystem survival, environmental quality, and human welfare. *Prerequisite:* Environmental Studies 100.

nomics 252. Regional Economic Development. (on demand) (3)
Regional economic development with special emphasis on the Appalachian region of the U.S. since the 1870's.

nomics 363. Money and Banking. (F) (3)
National banking system, nature and functions of money, the importance of credit, bank deposits, and loans. *Prerequisite:* Economics 153.

itional Courses listed under: Mathematics 211, Business Administration 351, Business cation 353, and History 241.

FICE ADMINISTRATION

e Administration 111-112. Typewriting. (F,S) (3-3)
student with one or more high school units in typewriting cannot take Office Administration 111 for credit.

Office Administration 121. Elementary Shorthand. (F) (3)
Principles of Gregg Shorthand, Series 90. A student with one or more high school units in shorthand cannot take Office Administration 121 for credit. *Prerequisite:* Office Administration 111 or current enrollment in Office Administration 111.

Office Administration 122. Intermediate Shorthand. (S) (3)
Continuation of Office Administration 121.

Office Administration 211. Advanced Typewriting. (S) (3)
Applying typewriting skill to practical on-the-job activities. *Prerequisite:* Office Administration 112 or equivalent.

Office Administration 221. Dictation and Transcription. (S) (3)
Emphasis placed on speed in taking dictation and in transcribing notes. *Prerequisite:* Office Administration 122 or equivalent.

Office Administration 301. Business English. (F) (3)
Using words effectively, language structure, punctuation.

Office Administration 302. Business Communications. (S) (3)
The methods and techniques of organizing business letters, memoranda, and reports. Includes intensive writing practice in class analysis, and student evaluation. *Prerequisite:* Office Administration 301 or English 111.

Office Administration 361. Office Management. (F) (3)
Office building, equipment, personnel supervision, control of office activities. (Even year only).

2. DEPARTMENT OF EDUCATION

Elementary Education—Secondary Education

The undergraduate programs in the Department of Education have as their primary objective the preparation of superior teachers for public and private schools, both elementary and secondary.

At Union College the education of prospective teachers is the responsibility of the College as a whole, not the Department of Education alone.

The teacher education programs described in the following pages prepare the student to receive a baccalaureate degree and, upon recommendation of the College, a Kentucky teacher certificate. A student who wishes to teach in a state other than Kentucky should determine certification requirements in that state (usually quite similar to Kentucky's), and plan his program accordingly. Information on certification requirements in other states is available in the Education Department office and in the Career Planning and Placement Office.

Students preparing for teacher certification must be admitted to the teacher education program of the college before they will be allowed to register for any of the professional education courses beyond Education 241 or Education 242. These students may not take professional preparation education courses on a Credit/Fail or Independent Study basis.

Graduates may continue their professional preparation by entering the Graduate Studies Program. A separate catalog is available from the Dean of Graduate Academic Affairs.

Objectives of the Teacher Education Program

The teacher education program at Union College seeks to aid each student in the realization of the following objectives:

1. A knowledge of the social, physical, and psychological factors which determine behavior and which promote intellectual growth, emotional balance, and wholesome personality.
2. The development of health habits, physical skills, and recreational interests essential to personal well-being and to highest teaching effectiveness.
3. An understanding of the principles and purposes of education in a democratic society.
4. The cultivation of attitudes and abilities essential to successful relationship with youth and professional associates.

. An understanding of the principles and techniques of effective teaching, and the development of appropriate teaching skills.

. An appreciation of the worth of teaching as a career and as an opportunity for service to youth and to society.

Requirements for Admission to Teacher Education Program

. Formal written application, submitted during the semester in which the student takes the first professional education course, Ed. 241. Application forms may be obtained in the Department of Education office.

. Completion of competency tests in reading, oral communication, written communication, writing and computation. Cut-off points are determined by the Union College faculty and are subject to change.

. Completion of Education 241, Introduction to Education; Education 242, Early Involvement; and English 111-112 with a semester grade of C or better.

. Completion of at least thirty semester hours of college credit with a cumulative grade point average of at least 2.25.

. Moral, social, and ethical behavior commensurate with the acceptable standards in the school community as well as in the community at large.

. Recommendation of four faculty members.

. General factors relating to teacher effectiveness including physical, mental and personality factors associated with teaching effectiveness and a general aptitude for teaching.

. Successful completion of an interview with members of the Teacher Education Committee.

. Acceptance by the Teacher Education Committee on the college.

Requirements for Admission to Student Teaching

1. Formal written application by mid-term of the semester preceding the planned student teaching. Application forms may be obtained in the Department of Education office.
2. Senior standing is a prerequisite for admission to student teaching.
3. Completion of at least 90 semester hours of credit with at least a 2.5 grade point average in all courses attempted and 2.5 in all work attempted in the area, major, or minor fields for which certification is sought.
4. Completion of three-fourths of all required professional education courses with an academic standing of at least 2.5.
5. Completion of three-fourths of all coursework for the teaching major or area of concentration if student teaching is to be done in this specialization; or completion of all the coursework for the teaching minor if student teaching is to be done in the minor area.
6. Approval of the department in which teaching fields are sought.
7. Moral, social, and ethical behavior acceptable in the school community as well as in the community at large.
8. A valid and current medical examination which includes a tuberculosis test filed with the Teacher Education Committee.
9. Maintenance of good standing since admission to the teacher education program.
0. Completion of institutional prerequisites with respect to time in residence and pre-student teaching laboratory experiences.
1. Acceptance by the Teacher Education Committee of the College.

ELEMENTARY EDUCATION CURRICULUM

General Education

A. English 111-112 (with grade of C or higher) ..... 6 semester hours

*B. Humanities ..... 18 semester hours
Three semester hours must be in Literature; remaining hours to be taken from the following: Art, Drama and Speech; Music; Foreign Languages; Religion; Philosophy; English Language and Literature (other than English 355).

C. Mathematics and Natural Science ..... 12 semester hour
Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hour shall be in the field of Physical Science and at least 3 semester hours shall be in the fiel of Biological Science. One of these two courses must be taken with a lab for a total of semester hours. All elementary education students must take General Science 401 a part of the Natural Science requirement.

*D. Social Science ..... 12 semester hour
History; Economics; Political Science; Sociology; Geography. One course must be take in History of Appalachia or Sociology of Appalachia.

E. Physical Education service course ..... 1 semester hou

II. General Requirements.
(No courses can be taken on a credit/fail basis except for Psychology 111 and the Socia Science course. No General Requirements courses can be taken on an Independent Stud basis.)

A. Social Science (History 233 or Sociology 141) ..... 3 semester hour
B. Introduction to Psychology (Psychology 111) ..... 3 semester hour
C. Children's Literature (English 355) ..... 3 semester hour
D. Structure of the Number Systems (Math 203) ..... 6 semester hour
E. Elementary School Art (Art 271) ..... 3 semester hour
F. Elementary School Music (Music 373) ..... 3 semester hour
G. Health and Physical Education in Elementary School (Physical Education 261) ..... 3 semester hour
H. Methods of Teaching Social Studies (Education 441) ..... 3 semester hour

III. Professional Preparation

A. Education 241 - Introduction to Education ..... 3 semester hour
B. Education 242 - Early Involvement ..... 3 semester hour
C. Education 351 - Human Growth and Development ..... 3 semester hour
D. Psychology 361 - Psychology of Learning ..... 3 semester hour
E. Special Education 365 - Foundations of Education for the Exceptional Child ..... 3 semester hour
F. Education 341 - Methods of Teaching Math ..... 3 semester hour
G. Education 361 - Reading in the Primary Grades ..... 3 semester hour
H. Education 362 - Teaching Reading in the Content Areas ..... 3 semester hour
I. Education 432 - Methods and Materials in the Elementary School ..... 4 semester hour
J. One of the following three courses:
1. Education 243 - Generic Teaching Skills ..... 3 semester hour
2. Education 451 - Human Interaction in the Schools ..... 3 semester hour
3. Education 452 - The Professional Teacher in the School ..... 3 semester hour
K. Education 433 - Supervised Student Teaching in the Elementary School ..... 12 semester hour

SECONDARY EDUCATION CURRICULUM

I. General Education

A. English Composition 111-112 (with grade of C or higher) ..... 6 semester hour
*B. Humanities ..... 18 semester hour
Three semester hours must be in Literature; remaining hours to be taken from the follow ing: Art; Drama and Speech; Music; Foreign Languages; Religion; Philosophy; Englis Language and Literature (other than English 355).
C. Mathematics and Natural Science ..... 12 semester hour
Biology, Chemistry, Mathematics, Physics, General Science. At least 3 semester hour shall be in the field of Physical Science and at least 3 semester hours shall be in the fiel of Biological Science. One of these two courses must be taken with a lab for a total of semester hours.

*No more than 6 semester hours in any one discipline.
**Choose one of the three (3) options listed.

*D. Social Science ..... 12 semester hours
History, Economics, Political Science, Sociology, Geography. One course must be taken in History of Appalachia or Sociology of Appalachia.

E. Physical Education service course ..... 1 semester hour

I. General Requirements for Students Preparing for Teaching in Secondary School.

A. Personal and Community Health ..... 3 semester hours

B. Introduction to Psychology ..... 3 semester hours

C. Majors, Minors, and Areas of Concentration**
An Area of Concentration ..... 48 semester hours
One Major ..... 30 semester hours
One Major of 30 semester hours and one Minor of 21 semester hours ..... 51 semester hours

Majors in subject combinations shall require 36 semester hours credit. In a combination of ubjects for majors, not less than 12 semester hours shall be in each subject within the major. Method courses shall be in addition to those in the majors and minors. Education 362 is required f students preparing to teach English. A teaching minor in English shall require an additional 3 emester hours of credit beyond the usual 21 and must include a course in linguistics.

I. Professional Preparation for Secondary Teachers. These courses are to be taken in a six-emester sequence in the following order:

A. Education 241 - Introduction to Education ..... 3 semester hours
(To be taken with Education 242)

B. Education 242 - Early Involvement ..... 3 semester hours
(To be taken with Education 241)

C. Education 351 - Human Growth and Development ..... 3 semester hours
(Prerequisites: Education 241 and 242)

D. Psychology 361 - Psychology of Learning ..... 3 semester hours
(Prerequisites: Education 241 and 242)

E. Education 243 - Generic Teaching Skills ..... 3 semester hours
(Prerequisites: Education 351 and 361)

F. Special Education 365 - Foundations of Education for the Exceptional Child ..... 3 semester hours
(Prerequisite: Education 243)

G. Education 452 - Methods and Materials for Secondary Education ..... 3 semester hours
(Prerequisite: Education 365)

H. Education 451 - Human Interaction in the Schools ..... 3 semester hours
(Prerequisite: Education 365)

I. Education 453 - Supervised Student Teaching in the Schools ..... 12 semester hours
(Prerequisites: Education 451 and 452).

J. Education 454 - The Professional Teacher in the School ..... 3 semester hours

SSOCIATE OF APPLIED SCIENCE IN OCATIONAL EDUCATION
or vocational teachers)

	Credit Hours
nglish 111 and 112—Freshman Composition	6
sychology 111—General Psychology	3
peech 131—Fundamentals of Speech	3
atural Science Core Requirement	4
umanities Core Requirement	3
ocial Science Core Requirement	3
xperience Credit for Vocational Certification	6-9

Designed for those who work in day care centers and agencies dealing with small children where a teacher certification is not quired.

Vocational Education Block (from state approved school) (transfer)	24
Free electives	9-12
	64

ASSOCIATE OF APPLIED SCIENCE IN EDUCATION*

	Credit Hours
English 111 and 112—Freshman Composition	6
Natural Science (Environmental Science 100 recommended)	4
Sociology 131—Introduction to Sociology or Sociology 421—Rural & Urban Sociology	3
Psychology 111—Introduction to Psychology	3
Humanities Requirement (speech or theatre recommended)	3
Art 271—Elementary School Art	3
Music 373—Elementary School Music	3
Education 241—Introduction to Education	3
Education 351—Human Growth and Development	3
Education 440—Early Childhood Education	3
English 355—Survey of Children's Literature	3
Health 270—Personal and Community Health	3
Social Work 171—Introduction to Social Services	3
Health 361—Principles of Nutrition	3
Ed. 365—Foundations of Ed. for Exceptional Child	3
Supervised Experience in Early Child. Ed.	3
Electives—(Recommended from Appalachian Semester, Kentucky History, Typing, Recreational Leadership Arts & Crafts, & Structure of Number Systems)	12
	64

ASSOCIATE OF APPLIED SCIENCE FOR GRADUATES OF STATE VOCATIONAL SCHOOLS

	Credit Hours
Credit for 22-month post high school vocational program	48
English 110 or 111—English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Free elective	3
	64

	Credit Hours
Credit for 11-month post high school vocational program	24
English 110 or 111—English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Elective Credits (planned curriculum developed & followed)	27
	64

A "C" (2.00) average is required and a minimum of 15 hours in residence.

For the vocational student wishing to continue his/her education to the Bachelor's degree level, a planned course of study (contract) will be developed so that the degree can be earned with an additional 64 hours of specified credit beyond the A.A.S. degree.

Graduates of the 11-month vocational programs should plan additional hours of general education credits within their electives to better prepare for the 4-year degree.

EDUCATION

ducation 241. Introduction to Education. **(F,S) (3)**
The purpose and function of education. Classroom and school organization, guidance services, library services, evaluation, reporting to parents and other phases of the school program .

ducation 242. Early Involvement Internship . **(F,S) (3)**
A practical course in which students are assigned to local school classrooms nine hours per week for thirteen weeks, and meet weekly to discuss and generalize their experiences. To be taken concurrently with Education 241.

ducation 243. Generic Teaching Skills. **(F,S) (3)**
Acquiring competence in the basic concepts and principles associated with the following skill areas: observation, diagnosis, instructional design and planning, instructional management, communication, evaluating, use of media and new technology. Includes experience in micro-teaching and field placement in local public schools.

ducation 341. Methods of Teaching Mathematics in Elementary School **(F) (3)**
Modern methods and materials for teaching mathematics in the elementary school. *Prerequisite:* Mathematics 203-204 or equivalent; admission to the Teacher Education Program.

ducation 351. Human Growth and Development. **(F) (3)**
Basic concepts for understanding the development of the child and the adolescent. Includes field experience.

ducation 361. Reading in the Primary Grades. **(F) (3)**
Methods and materials for the teaching of reading in the primary grades including observations, micro-teaching demonstrations, making of lesson plans, and evaluation of a child's readiness. *Prerequisite:* admission to the Teacher Education Program.

ducation 362. Teaching Reading in the Content Subjects. **(S) (3)**
Emphasis on study skills, individualized programs and reading in the content subjects. *Prerequisite:* (except for English majors) Education 361).

pecial Education 365. Foundations of Education of the Exceptional Child **(F,S) (3)**
Etiology and assessment of exceptional learning conditions; characteristics of exceptionalities; special education intervention.

ducation 401. Introduction to Counseling and Guidance. **(S) (3)**
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges, and related service-oriented agencies. Essential counseling and guidance services, policies, practice and procedures.

ducation 432. Methods and Materials in the Elementary School. **(F) (4)**
Emphasis on language arts, social studies, and science; directed observation; *Prerequisites:* Education 241, 341, 351, 361, and 362; Psy. 361; 90 semester hours college credit; quality point standing of 2.25 overall and at Union College; one semester residence; and admission to the Teacher Education Program at Union College. No late registration.

lucation 433. Supervised Student Teaching in the Elementary School. **(S) (12)**
Laboratory experiences in working with children, teachers, and others in school and community. Supervision by an experienced classroom teacher for a minimum of 10 weeks. Transportation and meals paid by the students. Application to be made one semester in advance. *Prerequisites:* See Requirements to Student Teaching. A supervisory fee of $100 is charged.

lucation 435. Laboratory Experiences in Education. **(on demand) (6)**
A substitute for student teaching for elementary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 242; scholastic standing of 2.25 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; and one semester residence at Union College.

ucation 440. Early Childhood Education. **(Sum) (3)**
Survey of the physical, emotional, mental, and psychological development of the child under six and the role of the kindergarten teachers in working with such a child.

ucation 441. Methods of Teaching Social Studies **(S) (3)**
Methods and materials for the teaching of elementary school social studies, including kindergarten through eighth grade curricula. The philosophies, terminology, and evaluation of methods and materials will be included. Prerequisite: Admission to the Teacher Education program.

Education 451. Human Interaction in the Schools. **(F,S) (3)**
Considers human interaction in the schools from a variety of perspectives and theories. Addresses the role of classroom management in the learning process. Students preparing to teach in secondary schools should take this course concurrently with Education 452.

Education 452. Methods and Materials in the Secondary School. **(F) (4**
Current teaching methods, materials, and innovations in the secondary school with directed observations. *Prerequisites:* Education 241 and 351; Psy. 361; 90 semester hours of college credit; quality point standing of 2.25 overall and at Union College; one semester of residence, and admission to the Teacher Education Program at Union College. In addition, a quality point standing of 2.25 or above is required in areas of concentration, major, and minors. No late registration.

Education 453. Supervised Student Teaching in the Secondary School. **(F,S) (12**
Under the direction of an experienced teacher, the student teacher directs the usual teaching activities in the classroom for a minimum of 10 weeks in local public schools. Application should be made one full semester in advance of the time the teaching is to be done. *Prerequisite:* See Requirements for Student Teaching .A supervisory fee of $100 is charged.

Education 454. The Professional Teacher in the School. **(F,S) (3**
Discusses the role of the professional teacher, including professional values, school community relations and teacher-parent interaction. Discusses aspects of local school operations, i.e., school law and finances. Students preparing to teach in secondary schools should take this course concurrently with Education 453.

Education 468. Educational Media. **(Sum) (3**
Practice in operating educational media and construction of classroom materials. Emphasis on educational television use in the classroom.

Education 495. Independent Study. **(F,S,Sum) (3**
Open only to advanced students in the field of Education who wish to do intensive reading in a specific interest area. *Prerequisites:* Twelve semester hours of Education and permission of the Head of the Department.

3. DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Paul S. Moore, *Department Head*
Health—Physical Education

HEALTH

Students preparing to teach in an elementary or secondary school in Kentucky are required to complete the following courses: for an elementary certificate, Health and Physical Education in the Elementary School; for a secondary certificate, Personal and Community Health.

Requirements for a Major in Health Education: For students choosing to get a teaching certificate, thirty semester hours from the courses listed under the Health department including 270, 330, and 340. In addition to the courses listed under the Health department, the following courses may be taken as electives to be included in the thirty semester hours: Sociology 271, Sociology 311, and Psychology 431.

Requirements for a Minor in Health Education: Twenty-one semester hours which must include Health 270, 330, and 340. Courses must be chosen from those listed under Health Education major.

Health 131. First Aid and Safety Education. **(S) (3**
Designed to aid the student in developing an understanding of the basic principles of accident prevention as applicable to the home, the highway, and the school. First aid measures for various injuries and illnesses are discussed and practiced.

Health 270. Personal and Community Health. **(F) (3**
The relationship of bodily functions to personal health and grooming, and to community and national health.

Health 330. School Health Practices. (S) (3)
A course dealing with the primary phases of school health—health instruction, health services, and healthful school environment—and how they can be coordinated into a functional health program.

Health 340. Physiology and Anatomy. (F) (3)
A study of cellular construction, tissues, organs, and systems of the human body. A study of the functions of these organs and systems as it deals with health and physical education disciplines.

Health 361. Principles of Nutrition. (S) (3)
Diet problems; study of nutrients and their relationships to health.

Health 411. Health Education in the Secondary School. (S) (3)
The experiences, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

Health 421. Community Health. (F) (3)
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

Health 451. School and Community Health Workshop. (Sum) (3)
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

Health 475. Critical Areas in Health. (F,Sum) (3)
Specific health problems confronting society today with particular reference to secondary age students.

Health 485. Field Experiences in Health. (F,Sum) (3-6)
A directed field experience in some phase of health, with consideration given to both the needs and interests of the student. Opportunities will be available for practical experiences in the school situation, official health agencies, and voluntary agencies.

Health 495. Independent Study. (F,Sum) (1-3)
Independent study for advanced students only.

PHYSICAL EDUCATION

Requirements for a Major in Physical Education: Students choosing to get a Secondary Teaching certificate must take thirty semester hours which must include 351, 361, 421, 461, Health 340, and four service courses. Health 131 may be included in the Physical Education Major.

Service Courses

A maximum of eight semester hours of service courses may be credited toward graduation. Physical education majors must take four service courses. This is the maximum that can be applied to a major, but others may be taken as electives. The following service courses also meet the elementary and secondary requirement for physical education.

Physical Education 111. Beginning Swimming. (F,S,Sum) (1)

Physical Education 112. Intermediate Swimming. (F,S,Sum) (1)

Physical Education 113. Senior Life Saving. (F) (1)
Prerequisite: Intermediate swimming or permission of the instructor.

Physical Education 121. Team Sports. (F) (1)

Physical Education 131. Archery and Badminton. (F,S) (1)

Physical Education 132. Beginning Golf. (F,S,Sum) (1)

Physical Education 133. Beginning Tennis. (F,S,Sum) (1)

Physical Education 135. Tumbling and Trampolining. (S, Even Year) (1)

Physical Education 141. Folk & Square Dancing. (S, Odd Year) (1)

Professional Courses

Physical Education 241. History of Physical Education. (S) (3)
From primitive man through the present, with particular emphasis on Greek physical education, European systems, and development of physical education in America. Some research into the history of various sports. (Even years only.)

Physical Education 261. Health and Physical Education in the Elementary School. (F) (3)
The role of the classroom teacher in physical education on the playground, in the gymnasium, and the classroom. How to correlate and evaluate. The application of games, movements, exploration, rhythms, self-testing activities, and screening tests.

Physical Education 265. Recreational Sports and Activities. (S) (3)
Presents students with information on various types of sports and activities, with emphasis on history, rules, equipment, skills, and techniques.

Physical Education 271. Sports Officiating .(Odd years only.) (F) (2)
Rules and officiating techniques in football, basketball, baseball, and track.

Physical Education 302. Coaching Basketball. (Even years only.) (F) (2)

Physical Education 303. Water Safety Instruction. (Even years only.) (S) (2)
Prerequisite: Senior Lifesaving 113 and/or Current Advanced certificate.

Physical Education 304. Coaching Baseball. (Odd years only.) (S) (2)

Physical Education 305. Coaching Track and Field; Swimming and Diving. (Odd years only.) (S) (2)

Physical Education 306. Coaching and Officiating Women's Team Sports. (Even years only.) (F) (2)

Physical Education 307. Coaching Soccer. (Even years only.) (F) (2)

Physical Education 317. Organization and Administration of Intramurals. (F) (3)
Planning, organizing, and directing a program of intramural activities for men and women. Attention is given to activities, awards, officials, finances, publicity, and other factors necessary to consider in administering an intramural program.

Physical Education 321. Recreational Leadership. (S) (3)
Leadership techniques in music, social games, arts and crafts, dramatics, camping, nature, and sports. Designed to aid students in enriching their own leisure time and to prepare for leadership in teaching, full-time Christian service, and social service.

Physical Education 351. Tests and Measurements in Health and Physical Education. (S) (3)
Evaluating Health & Physical Education by the construction and administering of tests. Emphasizes reliability, objectivity, and validity of tests, and school marks.

Physical Education 361. Organization and Administration of Health and Physical Education. (S) (3)
Administration of health and physical education in school. Setting up the program, and evaluating results. Emphasizes budget and finance, office management, preparing the curriculum, facilities, legal factors, and public relations.

Physical Education 421. Kinesiology. (S) (3)
An analysis of human motion and its relation to athletic and gymnastic activities; practical application of these principles.

Physical Education 461. Seminar in Health and Physical Education. (F) (3)
Designed for majors and minors who are preparing to teach. Seminar will include such topics as philosophy, teacher certification, competencies, the teaching process, and professional activities. Diversified practical experience will be possible by assisting with service courses and peer instruction in class.

Physical Education 495. Independent Study. (F,S,Sum) (3)
Independent work for advanced students only.

)ivision of Humanities

Dianne R. Ferris, *Chairman*
Department of Fine Arts Department of Languages
Department of Religion and Philosophy

HUMANITIES

umanities 101, 2, 3, 4. Chapel. (F,S) (1)
Participation in Chapel programs is designed to aid the student in achieving the breadth and flexibility of mind necessary for full participation in a complex culture. Four major themes are addressed: (a) God and the relations between God, the universe, and man; (b) ethical questions and moral issues; (c) the ceremony and liturgy of the Church; (d) significant art and music in the Christian tradition. May be repeated for a maximum of four credits in a four-year course of study.

umanities 202. Introduction to Film (S) (3) (H)
Film is studied as an art form concerned with the human values of mankind. Appreciation of film and its basic elements and techniques is stressed. (Even years only.)

DEPARTMENT OF FINE ARTS

Allan Green, *Department Head*
Art—Drama and Speech

Union College course offerings in the field of art provide service courses for several curricula nd opportunities for exploration and growth in artistic self-expression.

rt 132. Introduction to Art. (S) (3) (H)
An introduction to Art outlining basic approaches, principles, techniques and media as well as styles of expression, both past and present.

rt 271. Elementary School Art. (F) (3)
A studio course involving many kinds of art projects in many media, suitable and practicable for elementary grades.

rt 373. Art History. (On demand) (3) (H)
The intensive study of major movements, personalities, and styles of architecture, painting, sculpture of world art.

rt 495. Independent Study in Art. (F,S) (3)
Independent study or research on an approved topic. May be repeated for credit.

)RAMA AND SPEECH

Requirements for a Major: Union College offers a comprehensive major with two options. tudents may either fulfill the requirements for teacher certification in Drama/Speech or major in rama. Other than taking the Speech courses required for the first option, there is very little dif- erence between the two.

Core courses required for the major include Drama 251, 352, 331, 332, 365, 366, and 451; a total f twenty-one semester hours.

Students electing the Drama/Speech option are also required to take twelve hours in approved ourses in Speech, including Speech 131, and three hours of upper division dramatic literature ourses.

Students electing the Drama option are also required to take six hours of upper division ramatic literature courses and Drama 461.

Requirements for a Minor in Drama and Speech: Twenty-one semester hours, including Drama 51, 331 or 332, 365, 366. Cannot be used for a teaching minor certificate.

Requirements for a Minor in Drama: Twenty-one semester hours in Drama, including Drama 51, 331 or 332, 365, 366. Can be used for Teacher Certification.

rama 131. Introduction to the Theatre. (F) (3) (H)
Basic principles underlying the origin and development of theatrical presentation. Brief study of elements of production.

rama 151. Theatre Practicum. (F,S) (1) (H)
Actual practical experience in major college theatrical productions in the areas of acting, directing, and production work. May be repeated three times for credit.

Drama 251. Fundamentals of Acting. (F) (3
Theory and practice behind analysis and presentation of a role. (Even years only.)

Drama 321. European Drama since 1945. (F) (3) (H
A study of representative plays in translation by modern writers from Germany, France, Ital and Poland. (Odd years only.)

Drama 331. Play Production. (F) (3
Study and practice in theatrical design and stage lighting. *Prerequisite:* Drama 131 or permis sion of instructor. (Odd years only.)

Drama 332. Play Production. (S) (3
Study and practice in theatrical costuming and make-up. *Prerequisite:* Drama 131 or permis sion of instructor. (Odd years only.)

Drama 352. Advanced Acting. (S) (3
Scene study and period styles of acting. *Prerequisite:* Drama 251 or permission of instructo (Odd years only.)

Drama 365. History of the Theatre. (F) (3) (H
Study of theatrical presentation from the Golden Age of Greece to Ibsen. *Prerequisite:* Junio or Senior standing or permission. (Even years only.)

Drama 366. History of Modern Theatre. (S) (3) (H
Study of theatrical presentation from Ibsen to present. *Prerequisite:* Junior or Senior stand ing or permission. (Even years only.)

Drama 451. Directing. (S) (3
Study and analysis of scripts for production and of production techniques. Staging of one-ac play required. *Prerequisite:* Permission of instructor.

Drama 461. Senior Project in Drama/Theatre. (on demand) (3
A supervised project involving advanced work in some area of Drama or Theatre: criticism history, directing, design, etc. Open only to student majoring in Drama and electing the straight Drama option.

Drama 495. Independent Study in Drama.
Independent study or research on an approved topic. May be repeated for credit.

Speech 131. Fundamentals of Speech. (S) (3) (H
Study and practice in the basic elements of speech applicable in daily life, such as voice, ar ticulation, pronunciation, bodily activity, speech organization, outlining and research.

Speech 231. Interpretative Reading. (F) (3) (H
Analysis and oral interpretation of the various forms of literature. Special emphasis or developing qualities for interpretation of character, emotion, and artistic impersonation.

Speech 341. Debate. (S) (3) (H
The study and practice of formal debating. Case preparation and methods of argumentation using the national college debate topic for the year. Designed to help students think more clearly, organize their ideas more effectively, and present their conclusions more persuasive ly. (Even years only.)

Speech 342. Persuasion. (F) (3) (H
This course serves to acquaint students with the theory and practice of persuasive techni que; students will develop their own powers of persuasion and learn to recognize the rhetorical techniques employed by others. (Odd years only.)

DEPARTMENT OF MUSIC

Joe E. Tarry, III, *Department Head*

No Special Music Fees. No special fees exist for private lessons in music. Students majoring in other fields of study may avail themselves of class lessons in piano, voice, wind, and stringed instruments. Upon sufficient advancement, these students also may receive private instruction without any special fee being charged.

Preparatory Department. Preparatory work in piano, wind, voice, and stringed instruments is offered in the form of class or private lessons for pre-college students. There is a fee charged for these lessons. A similar arrangement is available for special students of college age and above who are not enrolled as full-time students in the regular curriculum.

Ensemble Requirement. All majors are required to participate in a minimum of seven semesters in one ensemble and a minimum of four semesters in another ensemble area.

Music Library. The music library, located in the Fine Arts Building, contains records, scores, and listening facilities.

Minor in Music. Twenty-one semester hours, including: Music 161, 162; three semester hours elected from either Music 321 or 322; two semester hours of music electives; two years of nsemble; and completion of the 202 level of course numbering in one field of applied music, or ight hours of applied music arranged differently with the consent of the department.

MUSIC MAJOR, B.A. and B.S.

Please see general requirements

ACADEMIC EMPHASIS	Sem. Hrs.
ound. of Music	8
armony	6
orm & Analysis	4
lusic History	12
pplied Music	8
nsemble	0
lusic Elective	2
	40

APPLIED EMPHASIS	Sem. Hrs.
Found. of Music	8
Harmony	6
Form & Analysis	4
Music History	6
Applied Music	16
Ensemble	0
	40

BACHELOR OF SCIENCE
COMBINATION MUSIC AND BUSINESS AREA

MUSIC AREA	Hours
.Ad. 271 Prin. of Market	3
.Ad. 351 Prin. of Finance	3
.Ad. 352 Prin. of Mgmt.	3
.Ad. 411 Business Law	3
cct. 171-172 Princ. Acct.	6
omp. Sci. 131 Intro. to Data Processing	3
con. 153-154 Prin. of Econ.	6
	27

BUSINESS CORE	Hours
Musc 161-162 Found. of Music	8
Musc 261-262 Harmony	6
Musc 111-412 Applied Music	16
Musc 322 Music History	3
Musc. 171, 176 String Class, Piano, Woodwind Class, or Brass Class (Choice of any 3)	3
	36

Additional Bus. Requirements	
.Ad. 272 Salesmanship	3
ff. Ad. 312 Bus. Comm.	3
.D. Elective	3
	9
Field Placement	3-10

General Requirements	
Freshman Composition	6
Humanities	12
Social Science	3
Natural Science	8
Electives	17-24

Within the Business Core and Requirements, the Music Area and Field Placement, there is a tal of 21-36 hours of upper division courses. This leaves 4-19 hours of upper division courses at must be taken from the electives or general requirements.

APPLIED MUSIC

The study of music through the development of performance skills is the central core in the aining and growth of the musician. Instruction is offered in the following instruments: piano, rgan, voice, woodwinds, brass, strings, and percussion. The following goals are common to all pplied music study:

developing in the student a high level of technical proficiency;

acquainting the student with the learning processes involved in that development;

familiarizing the student with a body of musical literature appropriate to his instrument;

assisting the student in mastering a representative sample of the repertory.

Complete outlines of the levels of technical proficiency and repertory expected at the end of ach semester of study are given to the student at the beginning of the semester. These are

organized in an eight-semester sequence designed to insure that the student completing the se quence has achieved a level of mastery appropriate to a baccalaureate music degree. Simila outlines exist for students enrolling for applied music study at the minor or elective level. Th content of these applied music course outlines is for the guidance of the student and th teacher, and is therefore a flexible rather than a rigid description of the requirements. Copies o these outlines may be requested from the Head of the Department of Fine Arts.

SECONDARY LEVEL

These courses are designed for students seeking a Bachelor of Arts or a Bachelor of Scienc degree with a music major or minor.

***Music 101-102. Applied Music.** **(F,S) (1-2**
Freshman level secondary applied music study.

***Music 201-202. Applied Music.** **(F,S) (1-2**
Sophomore level secondary applied music study.

***Music 301-302. Applied Music.** **(F,S) (1-2**
Junior level secondary applied music study.

***Music 401-402. Applied Music.** **(F,S) (1-2**
Senior level secondary applied music study.

MAJOR LEVEL

These courses are designed for students enrolled in the Music Business area and for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor.

***Music 111-112. Applied Music.** **(F,S) (2**
Freshman major or minor level applied music study.

***Music 211-212. Applied Music.** **(F,S) (2**
Sophomore major or minor level applied music study.

***Music 311-312. Applied Music.** **(F,S) (2**
Junior major level applied music study.

Music 317. Junior Recital. **(F,S) (0-1)**

***Music 411-412. Applied Music.** **(F,S) (2)**
Senior major level applied music study.

Music 415-416. Applied Field Literature. **(on demand) (2)**
A study of the literature for the student's major instrument, and related instruments where appropriate, with attention to stylistic characteristics and ornamentation.

Music 417. Senior Recital. **(F,S) (0-1)**

Music 418-419. Sight Reading and Accompanying. **(on demand) (1)**
Proficiency in reading the various clefs, vocal scores, and accompaniments, with emphasis on the techniques of sensitive accompanying. Keyboard majors and selected minors only.

HISTORY AND APPRECIATION

Music 121. Introduction to Music. **(F) (3) (H)**
A study of musical matters and styles for the student with a limited musical knowledge. Not open to music majors or music minors.

Music 122. Introduction to the History of American Popular Music. **(S) (3) (H)**
An historical approach involving the study of styles and personalities beginning with the origins of jazz and ending with the current trends and concepts of today. Open to all students.

Music 321, 322. Music History. **(F,S) (3-3) (H)**
A study of representative music both written and recorded, and readings, coordinating and integrating music skills.
(321) Antiquity through 1600.
(322) Baroque period to the present.

---

*Applied Music may be taken for Humanities credit under special arrangement. Consult with the Head of the Fine Arts Department for details.

usic 421-422. Music History Seminar. **(on demand) (3-3)**
Intensive study of a selected period or genre. Major paper required. *Prerequisite:* Music 321-322.

NSEMBLES

isic 152. Choir. **(F,S) (0-1)**
Open by audition only; performs in chapel, Christmas concert, spring concert, graduation. Limited to forty-nine students; four rehearsals per week. May be repeated for credit.

isic 153. Stage Band. **(F,S) (0-1)**
Open by audition only. A jazz-oriented ensemble of appropriate instrumentation limited to twenty students. Two rehearsals per week. May be repeated for credit.

isic 155. Brass Chamber Ensemble. **(on demand) (F,S) (0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

sic 156. Collegium Musicum. **(on demand) (0-1)**
Open to interested students. A performance group intended to give the student acquaintance with less frequently performed literature. One rehearsal per week. May be repeated for credit.

sic 157. Woodwind Chamber Ensemble. **(on demand) (0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

sic 158. String Chamber Ensemble. **(on demand) (0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

HEORY

sic 161-162. Foundations of Music. **(F,S) (4-4) (H)**
A combined course in the areas of music theory, history, and literature. Five periods per week. (Even years only).

sic 261-262. Harmony.** **(F,S) (3-3) (H)**
Continuation of Music 161-162 in the area of part-writing and analysis. Advanced chromatic harmony of the middle Romantic period. Three periods per week. *Prerequisite:* Music 162. (Odd years only).

sic 263-264. Ear Training. **(F,S) (1-1)**
Sight singing, ear training, and dictation to be taken concurrently with Music 261-262. Two periods per week. *Prerequisite:* Music 162. (Odd years only).

sic 361-362. Form and Analysis** **(F,S) (2-2) (H)**
The development of musical forms from small units to large. Study of large scale analytic techniques including those necessary for late 19th and early 20th century Music. *Prerequisite:* Music 262. (Even years only).

sic 461-462. Counterpoint. **(on demand) (2-2)**
The vocal counterpoint of Palestrina and the instrumental counterpoint of Bach. *Prerequisite:* Music 162.

sic 465. Theory Seminar. **(on demand) (3)**
An advanced course in music theory, including a study of contemporary practices. *Prerequisite:* Music 362, and permission of the instructor.

USIC EDUCATION

ic 171-172. String Instruments Class. **(on demand) (F,S) (1-1)**
Class instruction in string instruments. (Even years only).

ic 173-174. Piano Class. **(F,S) (1-1)**
Class instruction in piano.

ic 175-176. Wind and Percussion Instruments Class. **(on demand) (F,S) (1-1)**
Class instruction in woodwind, brass, and percussion instruments. (Odd years only).

**dents considering electing advanced music theory courses for Humanities credit should consult with the instructor to determ the extent of prior background needed for these courses.

Music 177-178. Voice Class. (F,S) (1-1
Class study for students who are not prepared to study at the level of private applied voice

Music 373. Elementary School Music. (S) (3
Methods and materials in the elementary school. Will include functional ability at the pian keyboard, the fundamentals of music, and library research.

INDEPENDENT STUDY

Music 495. Independent Study. (F,S) (2-3
Independent study and/or research on an approved topic. *Prerequisite:* Permission of the stu dent's major professor. May be repeated for credit.

DEPARTMENT OF LANGUAGES

Jan Finkel, *Department Head*
English—French—German

ENGLISH

Requirements for a Minor: A minimum of twenty-one semester hours in addition to Englis 111, 112, including English 221, 222; 241 or 242; 311; 372; either 351, 352, or 451; and 401 or 421 English minors are also advised to take at least six hours of a foreign language.

Requirements for a Major: A minimum of thirty semester hours in addition to English 111, 112 and including all courses required for a minor; either English 321, 322, or 332; and 472. Englis majors are also advised to take at least six hours of a foreign language.

Requirements for an Area: Forty-eight semester hours, thirty of which shall satisfy the re quirements for a major, and including an advanced writing course; and courses in speech c drama.

Students preparing to teach high school English are required to take Education 362 an should elect the English major, minor, or area. These students should consult with members c the Education Department for full information about course requirements.

A general prerequisite for 200 level courses is the successful completion of English 111, 112 Students are urged to take English 221, 222 before entering more advanced courses. Student who have not taken English 221, 222 are urged to consult with members of the Departmen before enrolling for advanced work.

English 110. Development English. (F,S) (3
Training in college-level language skills. Designed to prepare students for English 111 an other introductory courses.

English 111. Freshman Composition I. (F,S) (3
Writing papers from a variety of rhetorical approaches. Reading of short prose pieces a models and for discussion. Must precede English 112.

English 112. Freshman Composition. (F,S) (3
Literary models and a brief introduction to literary forms provide the basis for longer theme emphasizing critical writing and documentation.

English 121-124. Journalism Practicum. (F,S) (1
Actual operation of the *Orange and Black* college newspaper in areas such as editing newswriting, photography, layout and feature writing. May be taken up to four times fo credit. The second, third, and fourth times the course is elected will earn humanities credi

English 221-222. Survey of English Literature. (F,S) (3-3) (H
The first half includes the Middle Ages, the Renaissance, the Restoration and Eighteent Century, and the second includes Romantics, Victorians, and the Twentieth Century. Eithe course may be taken separately and not necessarily in sequence.

English 241-242. Major American Writers. (F,S) (3-3) (H
The first half ranges from Irving to Whitman (1800-1860), and the second from Dickinson t Faulkner (1860-1950). Either course may be taken separately and not necessarily in sequence (Even years only).

English 272. Special Topics in Literature. (F or S) (3) (H)
One course in a special topic such as Appalachian Literature, Commerce in Fiction, and Women in Literature will be offered each year.

English 311. Intermediate Composition. (S) (3) (H)
A writing course designed to reinforce and expand writing skills. Expository and argumentative papers of substantial length and an extensive research paper. Appropriate selected readings for discussion and analysis to provide perspective for the student's own writing. *Prerequisites:* English 112 and junior or senior standing.

English 321. English Renaissance Literature. (F) (3) (H)
A study of poetry, prose, and non-Shakespearean drama, beginning in the early sixteenth century and ending with Milton. (Odd years only.)

English 322. Restoration and Eighteenth Century Literature. (S) (3) (H)
Prose and poetry of the neo-classical age, beginning with Dryden and his contemporaries and extending through Samuel Johnson. (Odd years only.)

English 325. British Drama in the Twentieth Century. (F) (3) (H)
Modern issues and modern society as shown in works of the modern British theatre and the contribution of typical writers both to the theatre and society. (Even years only.)

English 331. English Romantic Period. (F) (3) (H)
The prose and poetry of the first third of the 19th century, emphasizing the work of Wordsworth, Coleridge, Byron, Shelley, and Keats. (Odd years only.)

English 332. Victorian Period. (S) (3) (H)
Major poets and prose writers, emphasizing the contributions of such masters as Tennyson, Browning, and Arnold. (Odd years only.)

English 351-352. The Novel. (S,F) (3-3) (H)
Historical study of the growth of the novel as a form. The first course includes novels from Defoe through the Brontes; the second begins ca. 1850 and goes through Faulkner. Either course may be taken separately and not necessarily in sequence. (Even Spring; odd Fall only.)

English 355. Children's Literature. (F) (3) (H)
Children's books can entertain, inform, inspire, and challenge adults as well as children. This course will survey a wide variety of fiction and poetry enjoyed by children and suggest ways of evaluating these works as literature.

English 372. Shakespeare. (S) (3) (H)
A critical approach to selected histories, comedies, and tragedies, and focusing on their timeless human, literary and dramatic qualities.

A general prerequisite for 400 level courses is junior standing.

English 401. Modern Grammar. (F) (3) (H)
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent developments in generative semantics. Considerable attention will be paid to the possibilities of practical applications of linguistic theory. (Even years only.)

English 402. Advanced Composition. (S) (3) (H)
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student. (Even years only.)

English 419. Composition for Teachers. (S) (3)
Review of basic elements of composition with regular writing assignments in both expository and argumentative modes. Techniques of marking and evaluation of student papers. Research techniques, a methodology for teaching students to develop a research paper and practical application of the methodology through the assigment of a research paper as an integral part of the course itself. (Odd years only.)

English 421. History of the English Language. (F) (3) (H)
A study of the origins and developments of the English language from Anglo-Saxon times to the present. (Odd years only.)

English 451. Modern Poetry. (F) (3) (H)
American and British poetry, with consideration of ways of reading, criticizing, and writing verse in this century. (Odd years only.)

English 472. Seminar in Literature. (S) (3) (H)
Intensive study of a major writer, group, or literary topic. May be repeated once for credit.

English 495. Independent Study.* (F,S) (3

Intensive individual work, under supervision, in some phase of English, American, or worl literature, linguistics, or composition not otherwise covered in the curriculum. *Prerequisites* Twenty-four hours of English above English 111, 112, and permission of the head of the department. May be repeated for credit.

FRENCH

The program offers the opportunity to gain some understanding of France and its culture a well as a basic knowledge of the French language. Students offering more than one entranc unit in French and students transferring from other colleges should consult with the Head of th Department of Languages before registering for any course in French.

French 111-112. Elementary French. (F,S) (3,3) (H

Basic French grammar, practice in the oral and written language. (Odd years only.)

French 211-212. Intermediate French. (F,S) (3,3) (H

More detailed study of grammatical structure; study of important literary works, individua collateral reading. *Prerequisite:* French 111-112 or equivalent. (Even years only.)

French 331. French Civilization. (S) (3) (H

The economic, social, and cultural development of France; French contributions to worl civilization. May not count toward fulfillment of the language requirement. No knowledge c French required. (Even years only.)

French 495. Independent Study.* (F,S) (3

GERMAN

The program offers the opportunity to gain some understanding of Germany and its culture a well as a basic knowledge of the German language. Students offering more than one entranc unit in German and students transferring from other colleges should consult with the Head c the Department of Languages before registering for any course in German.

German 111-112. Elementary German. (F,S) (3,3) (H

Basic German grammar; simple reading; practice in the oral and written language.

German 211-212. Intermediate German. (F,S) (3,3) (H

More detailed study of grammatical structure; reading of important literary works; individua collateral reading. *Prerequisite:* German 111-112 or equivalent.

German 331. German Civilization. (S) (3) (H

The economic, social, and cultural development of Germany; German contributions to worl civilization. May not count as part of the language requirement. No knowledge of German r quired. (Odd years only.)

German 495. Independent Study.* (F,S) (3

DEPARTMENT OF RELIGION AND PHILOSOPHY

Robert D. Matthews, *Department Head*

Courses in this Department are designed to acquaint the student with the Judaeo-Christia tradition and the other great religious traditions of mankind and with the great traditions ar disciplines of human thought; to deepen his awareness of himself and of the human cor munity; to cultivate his powers of critical examination and the meaning and direction human existence.

Studies in religion are especially recommended for students of art, history, and literatur and for students preparing for Christian vocations.

Studies in philosophy are especially recommended for pre-professional education for suc vocations as the Christian ministry, college teaching, law, journalism, creative writing, ar art, as well as for students of history, literature, and the sciences.

---

*May be counted toward the Humanities Requirement if topic approved by Head of the Department of Languages, and filed wi the Registrar.

Pre-ministerial preparation. The American Association of Theological Schools has stated that he college work of students planning to enter the ministry should result in at least the following: . Ability to speak and write English clearly and correctly, to think clearly, and to read at least ne foreign language; 2. Acquaintance with the world of men and ideas, the world of nature, and ne world of human affairs; and 3. A sense of achievement through the mastery of fields of study nd through honors work or other independent study. The student is expected to become well rounded in English, philosophy, and history, and to gain some background in social studies especially psychology and sociology), the natural sciences, languages, and religion.

CHRISTIAN EDUCATION

In recognition of increasing demand for trained young men and women as full-time Christian orkers in the unordained ministry of the local church, to serve in the capacities of pastor's ssistant, director of youth work, or Director of Christian Education, a specific four-year course f study has been arranged, using the facilities of various departments. It is designed to meet he basic needs of students who wish to go directly into church positions without graduate ork.

The 24-hour major is recommended in Religion, including Rel. 222, plus courses in music, rama, and Appalachian studies. A second major or minor in drama or music is often helpful. he following three courses should supplement the major:

Speech 131. Fundamentals of Speech
Physical Education 321. Recreational Leadership
Psychology 402. Counseling Theories and Techniques

RELIGION

Requirements for a Major. The twenty-four hour major, recommended for Christian Education nd pre-ministerial students, must include courses 111, 112 and 311, plus Philosophy 261. The irty-hour major may include Philosophy 371.

Requirements for a Minor. Twenty-one semester hours, at least nine of which must be in ourses numbered above 300.

eligion 101. Conference Studies. **(on demand) (0)**
A study of books required by the Methodist Church for the local preacher's license. Required of all recipients of ministerial loan-grants who have not yet obtained the license to preach.

eligion 111. Old Testament History, Literature, and Interpretation. **(F) (3) (H)**
The history of Israel from the earliest times to the Maccabean Age. Historical and literary criticism and religious significance of the emergence of Judaism. (Odd years only.)

eligion 112. New Testament History, Literature, and Interpretation. **(S) (3) (H)**
Attention to author, date, origin, historical and religious significance. Religion 111 recommended. (Odd years only.)

eligion 121. Primitive Religions. **(F) (3) (H)**
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies. (Odd years only.)

eligion 127. Archaeology and the Bible. **(S) (3) (H)**
Exciting archaeological discoveries, especially those related to the Bible, supplemented by wide reading in books, magazines, and newspapers, and class reports, color slides, and movies.

eligion 201-202. Elementary New Testament Greek. **(F,S) (3,3) (H)**
A semi-inductive approach to koine Greek, recommended for persons interested in religion as well as for religion majors.

eligion 212. The Old Testament Prophets. **(F) (3) (H)**
The nature of prophecy and the prophetic movement in Israel from its beginning with Moses to its close with the book of Jonah. Religion 111 recommended. (Even years only.)

eligion 222. Administration and Education in the Local Church. **(S) (3)**
Administrative responsibilities of the Director of Christian Education as related to the pastor, local church governing body, and the congregation. Theory and practice of Christian Education with special attention to planning a year's program in the local church.

eligion 231. The Life and Teachings of Jesus. **(S) (3) (H)**
The world in which Jesus was born and an interpretation of his messianic consciousness, personality, activities, and teachings. Religion 112 recommended. (Even years only.)

eligion 241. The Life and Teachings of Paul. **(F) (3) (H)**
The world of Paul, his life, teachings, and significance, using his letters as the primary source. Religion 112 recommended. (Even years only.)

eligion 301-302. Elementary Old Testament Hebrew. **(F) (3) (H)**
A study of sufficient grammar to read simple Old Testament passages, recommended for persons interested in religion as well as for religion majors.

Religion 311. Introduction to Christian Thought. (S) (3) (H)
Examination of traditional and contemporary understanding of the Christian faith, with emphasis on the nature of God and of man; the significance of Christ and the Church; the relation of religion to morality; the meaning of Creation and Redemption; and the interpretation of Human Destiny. *Prerequisite:* 112. (Even years only.)

Religion 321. Primitive Religions. (F) (3) (H)
Same course as Religion 121, but with more independent research. For upperclassmen. (Odd years only.)

Religion 327. Archaeology and the Bible. (S) (3) (H)
Same as Religion 127 but with additional reading and reports.

Religion 353. Church History. (on demand) (3) (H)
The origin and development of the Christian Church from its beginning through the Reformation.

Religion 355. World Religions. (S) (3) (H)
A descriptive account of the faith and practices of present-day world religions, with emphasis on Hinduism, Buddhism, Confucianism, Islam.

Religion 479. Seminar in Religion. (on demand) (3) (H)
Intensive study on a special subject, with oral and written reports. Possible topics include The Fourth Gospel, Apocalyptic Literature, Pauline Theology, Wisdom Literature, The Apostolic Period. *Prerequisite:* Advanced standing and permission of the instructor.

Religion 495. Independent Study. (F,S) (3)
Independent study or research on an approved topic. May be repeated for credit.

PHILOSOPHY

Requirements for a Minor: Twenty-one semester hours.

Philosophy 151. Introduction to Philosophy. (F,S) (3) (H)
Both a study of the nature of philosophy, its aims, problems, and methods, and an exercise in philosophizing in which the student clarifies constructively and evaluates critically his own and other understandings of life.

Philosophy 202. Logic. (S) (3) (H)
Cultivation of rational acuity through an examination of the procedures and limits of rational discourse. (Odd years only.)

Philosophy 261. Philosophy of Religion. (F) (3) (H)
An introduction to basic modern concepts, issues, and methods in the philosophical examination of religion. (Odd years only.)

Philosophy 371. Ethics. (F) (3) (H)
Cultivation of reasoning in moral decision-making through an examination of traditional ethical theories, contemporary moral issues and the structure of moral decision.

Philosophy 376. History of Western Philosophy I: Ancient and Medieval. (on demand) (3) (H)
Philosophical thinking in its cultural context, from its birth through the classical and medieval eras.

Philosophy 377. History of Western Philosophy II: Modern. (on demand) (3) (H)
The rise and development of modern thought-forms through the nineteenth century.

Philosophy 378. History of Western Philosophy III: Contemporary. (on demand) (3) (H)
Twentieth century western thinking and its nineteenth century backgrounds, with particular reference to modern idealism, phenomenology, existentialism, pragmatism and the analytical movement. *Prerequisite:* any philosophy course.

Philosophy 479. Seminar in Philosophy. (on demand) (3) (H)
Intensive study of a special topic such as Epistemology, Metaphysics, Plato, Kant. Permission of instructor required.

Philosophy 495. Independent Study. (F,S) (3)
Independent study or research on an approved topic. May be repeated for credit.

Division of Natural Sciences

Santaram Chilukuri, *Chairman*
Biology—Chemistry—Environmental Studies
General Science—Mathematics—Physics
Radiologic Technology
Coal Mining Technology

PRE-PROFESSIONAL PROGRAMS

Since professional schools vary considerably in their admission requirements, the student is advised to select the professional school he wishes to attend later, and then choose pre-professional courses accordingly. The science faculty should be consulted before registration in order to assist the student in preparing a course schedule. For details of a specific program, the following faculty members should be consulted.

Dentistry—Nussbaum & Chilukuri
Engineering—Chilukuri
Medical Technology—Staff
Medicine—Nussbaum & Chilukuri
Optometry—Nussbaum & Chilukuri
Pharmacy—Khatri
Physical Therapy—Staff
Radiology Technology—Staff
Veterinary Medicine—Nussbaum & Chilukuri

PHYSICAL THERAPIST ASSISTANT PROGRAM

Union College and Jefferson Community College, in Louisville, Kentucky, have entered into an agreement whereby a person from southeastern Kentucky may work toward an Associate of Applied Science degree and qualify to be a Physical Therapist Assistant. The program is a two-year program. The student will take courses at Union College during the first year and complete the program at Jefferson Community College during the second year.

This program prepares a person to become a skilled assistant working under the supervision of a licensed physical therapist. Upon graduation, physical therapist assistants may seek positions in hospitals, extended care facilities, rehabilitation clinics, and in mental retardation and mental illness institutions.

To qualify for graduation from this program, a student must also present a Red Cross First Aid Certificate earned within the last four years. Students who enter this program will be asked to state in writing their intent to return to southeast Kentucky to work as physical therapist assistants.

Further information may be obtained from the appropriate faculty person (see above) or the Office of Academic Affairs.

DEGREE IN MEDICAL TECHNOLOGY

Union College has cooperative agreements with University of Louisville and The Methodist Hospital of Kentucky, Pikeville, in which the student attends Union College for three years and, upon acceptance, enters the cooperating institution and receives clinical training in medical technology for twelve months. On satisfactory completion of the program the student is awarded a bachelor's degree in medical technology and should be qualified for a national certifying examination.

COMBINED DEGREE IN ENGINEERING

A cooperative "Three-Two Plan" has been worked out with the University of Kentucky and Auburn University in which the student attends Union College for three years pursuing certain pre-engineering courses in addition to a solid program in liberal arts. At the end of the three years, upon the recommendation of Union College, he enters the cooperating university or any accredited engineering school as a junior and in two additional years completes all the requirements for the B.S. degree in Engineering. Both the B.A. or B.S. from Union College and B.S. in Engineering from the cooperating university are awarded at the end of the fifth year.

COMBINED DEGREES IN HEALTH SCIENCES

Students may elect a Bachelor's degree in pre-professional studies at Union College or ma arrange for transfer to accredited medical, dental, veterinary medicine, optometry, or medic technology schools for their professional work after three years. On completion of the profe sional studies, they will also be awarded their Bachelor's degree from Union College. (See th section on Combined Degrees.)

SCIENCE EDUCATION MAJORS (SPECIALIZATION FOR HIGH SCHOOL CERTIFICATION)

The following Areas of Concentration are acceptable for the requirements for the specializa tion component of the Provisional High School Certificate.

1. AREA IN MATHEMATICS-PHYSICAL SCIENCE
   The requirements are a total of 48 semester hours with 15 semester hours of chemistry; 1 semester hours of physics numbered 211 and above, including laboratory; 15 semester hour of mathematics numbered 241 and above; 3 semester hours of electives chosen fror chemistry courses and physics courses numbered 211 and above, or mathematics course numbered 241 and above. At least 18 semester hours must be in courses numbered 300 an above. See Department of Education for professional requirements.
2. AREA IN SCIENCE
   The requirements are a total of 48 semester hours with 12 semester hours of biology; 1 semester hours of chemistry; 12 semester hours of physics courses numbered 211 and above, including laboratory; environmental studies 350; 9 semester hours of electives choser from biology, chemistry, or physics courses numbered 211 and above. At least 21 semeste hours must be in either biology, chemistry, or physics. At least 18 semester hours must be ir courses numbered 300 and above. See Department of Education for professiona requirements.

BIOLOGY

Requirements for a Major: Thirty semester hours in Biology including 111, 232, 233, 361, 441 and 452 are required. Required science cognates consist of Math 111: Chemistry 111, 112, 131 and 132; Physics cluster 101, 103, 110, and 112, or Physics cluster 211, 212, 213, and 214; General Science 471. Math 241, Chemistry 311-312, and a statistics course are strongly recommended.

Requirements for a Minor: Twenty-one semester hours in Biology.

Biology 111. Introduction to Biology. **(F,S,Sum) (4) (NS)**
A course emphasizing general concepts of modern biology for majors and nonmajors. Topics surveyed include cell biology, bioenergetics, molecular and Mendelian genetics, reproduction, development, evolution, and ecology. Human relevance is stressed. This course is a prerequisite to all other courses in biology.

Biology 151. Medical Terminology. **(F) (2) (NS)**
The study of the specialized terminology of medical science.

Biology 232. General Zoology. **(S) (4) (NS)**
A survey of the animal kingdom with emphasis on animal diversity, evolution, and environmental relationships. Additional topics include energy metabolism, taxonomy, reproduction, population phenomena, behavior and sociobiology.

Biology 233. General Botany. **(F) (4) (NS)**
A survey of the plant kingdom from the bacteria through the flowering plants with emphasis on evolution and environmental relationships. Additional topics include plant physiology, metabolism, morphology, taxonomy, and human economic importance.

Biology 234. Microbiology. **(S) (4) (NS)**
An introduction to the classification, morphology, physiology, and genetics of the bacteria, fungi, viruses, and micrometazoans, and their roles in nature, health, and industry. Laboratory work stresses techniques for the culture and identification of microorganisms. A portion of the course is devoted to immunology.

Biology 314. Invertebrate Zoology. **(4) (NS)**
An intense study of the invertebrate phyla including their morphology, taxonomy, physiology, evolutionary and ecological relationships.

Biology 315. Vertebrate Biology. **(4) (NS)**
The anatomy, physiology, taxonomy, ecology, behavior, and evolution of the vertebrate phyla with emphasis on the species endemic to southeastern Kentucky.

ology 321. Field Biology. (3) (NS)
Field investigations including observation, collection, and identification of local fauna and flora are offered under discreet course headings including: Limnology, Ornithology, Entomology, Local Flora, Dendrology, and Mycology. Pertinent field data is collected and analyzed appropriately.

ology 330. Anatomy. (F) (3) (NS)
A study of the tissues, organs, and organ systems of vertebrates with emphasis on the human body in health-related sciences.

ology 331. Human Physiology. (S) (4) (NS)
A study of the functioning of the human organ systems with normal and clinical considerations.

ology 361. Genetics. (F) (4) (NS)
A study of the principles of inheritance including Mendelian, population, and cytogenetics. *Prerequisite:* Math 111.

ology 441. Ecology. (4) (NS)
A study of the relationships between organisms and their abiotic and biotic environment including biogeochemical cycles, population dynamics, diversity, and pollution of in terrestrial and aquatic ecosystems. *Prerequisites:* Biology 232 and 233. Completion of Biology 361 is recommended.

ology 452. Cell Biology. (4) (NS)
A sophisticated treatment of the structure, biochemistry, and functioning of life at the cellular level. Emphasis is given to bioenergetics, enzyme kinetics, molecular genetics, immunology, and organelle physiology. *Prerequisites:* Math 111, Chemistry 112, and sixteen hours in biology. Prior completion of physics and organic chemistry is recommended.

ology 495. Independent Study and Research. (F,S) (1-3)
An introduction to the methods of science through original research. For advanced students who have demonstrated potential for performing an independent investigation of a substantive problem. The problem is chosen and carried out in collaboration with the instructor. A typewritten report in publication style is required.

CHEMISTRY

Requirements for a Major: Thirty semester hours of Chemistry including Chemistry 111, 112, 1, 132, 212, 311, 312, and 342. Science cognates consist of Physics 211, 212, 213, 214, 311; athematics 111, 241, 242; and General Science 471.

Requirements for a Minor: Twenty-one semester hours which should include Chemistry 111, 2, 131 and 132, 311 and 312.

emistry 111-112. General Chemistry. (F,S) (3,3) (NS)
A systematic study of the fundamentals and applications of the experimental and theoretical laws of chemistry. Major topics include nomenclature, stoichiometry, chemical thermodynamics, equilibrium, acid-base reactions, atomic and molecular theory and structure, chemical kinetics and nuclear chemistry. Examples and problems are drawn from all areas of chemistry. Concurrent registration in General Chemistry Laboratory, Chemistry 131-132. *Prerequisite:* Math 111 (may be taken concurrently).

emistry 131-132. General Chemistry Laboratory. (F,S) (1,1) (NS)
Laboratory experiments in general chemistry that illustrate basic principles and develop laboratory skills. Experiments are coordinated with the General Chemistry topics. Inorganic qualitative analysis included in Chemistry 132. Three hours of laboratory per week. Concurrent registration in Chemistry 111-112.

emistry 212. Quantitative Analysis. (F) (4) (NS)
A study of important volumetric and gravimetric analyses presented from a modern theoretical standpoint. Also an introduction to the study of advanced methods of analysis including some newer instrumentation techniques. *Prerequisite:* Chemistry 112, 132.

emistry 311-312. Organic Chemistry. (F,S) (4) (NS)
A course in the chemistry of organic compounds. Unitized laboratory work is designed to illustrate the basic principles of organic chemistry. *Prerequisites:* Chemistry 112 and 132.

hemistry 342. Physical Chemistry. (S) (4)
A study of atomic structures and chemical bonding in terms of modern quantum theory. Topics include molecular spectra, physical methods of investigation and chemical kinetics. *Prerequisites:* Math 242 and Physics 212.

Chemistry 361. Coal, Water and Soil Analysis. (S)
An advanced course in the study of the principles and techniques of coal, water and s analysis. Topics include the major types of analysis performed in industrial resear laboratories. Includes two three-hour labs per week. *Prerequisite:* Chemistry 212.

Chemistry 411. Inorganic Chemistry. (F)
A systematic study of the structure, properties and reactions of non-carbon elements, w emphasis on the non-metals and the transition metals. Topics include atomic-molecu structure and bonding, physical methods of investigation, organometallic chemistry a bioinorganic chemistry. *Prerequisite:* Chemistry 312. (Even years only.)

Chemistry 495. Special Problems. (F,S)
This is an introduction to the methods of scientific research. The course is designed for t advanced student who has demonstrated ability to do independent work in Chemistry. It w consist of a particular problem decided upon after consultation with the instructor. Upo conclusion of the work a typewritten and bound report-thesis may be required. An examin tion may or may not be given, depending on the nature of the problem.

ENVIRONMENTAL STUDIES

Requirements for a Minor: Twenty-four hours, to be chosen by the student, the student's maj advisor, and an advisor from the Environmental Studies Program. Courses are also listed und the various departments to which they relate. The core: Environmental Studies 100, Biology 11 Economics 251 *or* Sociology 251 and Environmental Studies 313. The remainder of the cours are to be chosen from other Environmental Studies courses or the following recommended ele tives: Biology 315, 321, 441; Geography 241; Health 361, 421; Mathematics 125; Philosophy 37 Sociology 311, 421; Chemistry 362 and certain experimental courses.

Env. Studies 100. Man and His Environment. (S) (4) (N
A multidisciplinary discussion of the effects of man's activities on his environment. Th course may be used to meet the natural science requirement for any student, but not as physical science for students seeking teacher certification.

Env. Studies 110. Physical Systems of the Environment. (F) (3) (N
A study of the physical environment as the home of man. Emphasis on distribution and i teraction of environmental variables (weather, landforms, vegetation, soils, and climate). Th course may be used to fulfill the physical science requirement for students seeking teach certification. (Even years only.)

Env. Studies 113. Geology of Coal. (F) (3) (N
Introduction to Physical Science, with the main emphasis on the geology of coal; e vironmental problems and energy needs will be explored.

Env. Studies 244. Reclamation and Land Use. (S) (
A detailed study of how surface mining affects the natural environment and the processe used to reclaim the land and restore it to a natural and/or useful state. *Prerequisite:* Co Technology 242.

Env. Studies 313. Environmental Policy. (S) (
A study of the decision-making processes and the consequences of alternative courses action on environmental quality. Analyzes the impact of public opinion, the various branche of government and pressure groups on environmental/energy policies both at the federal an state levels. *Prerequisites:* Environmental Studies 100 and an introductory political scienc course, or permission of instructor. (Odd years only.)

Env. Studies 350. Man's Geologic Environment. (F) (4) (NS
Significance of regional and local geological features and processes in land use planning Use of geological information to reduce conflicts in utilization of mineral and wate resources and damage from natural hazards. *Prerequisite:* ENVS 110 or ENVS 113. (Odd year only.)

Env. Studies 469. Appalachian Environmental Workshop . (Sum) (3) (NS
A workshop for inservice teachers and mature undergraduates with emphasis on en vironmental education and issues. The course treats physical, ecological, cultural an socioeconomic aspects of the Appalachian setting.

Env. Studies 487. Field Practicum in Environmental Studies. (F,S) (2-4) (NS
Must be approved by the Director of Experiential Education.

GENERAL SCIENCE

Neither a major nor a minor is offered.

n. Science 113. The Metric System. (S) (1) (NS)
The nature of measurement, the history of measurement and the metric system, measurement of length, volume, mass, temperature, and area in metric units will be discussed.

n. Science 114. Introduction to Astronomy. (S) (4) (NS)
An introduction to the elements of astronomy. Constellation identification, telescope operation, properties of the moon and planets, solar features, stars, galaxies, and cosmology.

n. Science 401. Science: Concepts, Processes and Inquiry. (S) (3)
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, experimenting, etc. With the laboratory materials from the new science program he will explore their use in teaching children these processes. As materials from such programs as ESS, SSIS IME, IIS, ISCS, PSSC, PHYSICS, CHEMS, etc., are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching science will be stressed along with individualized instruction, learning theory, laboratory equipment use (commercial and home-made) and multimedia instruction. Natural science credit for education majors only.

n. Science 471. Science Seminar. (S) (1)
A lecture/discussion of selected topics of interest, led by faculty members of the Division of Natural Sciences, invited speakers, and student participants. May be repeated once; a student can earn a maximum of two credit hours through this course. All natural science majors must take this course at least once. *Prerequisite:* Natural science major with Junior or Senior standing, or permission of the instructor.

MATHEMATICS

Requirements for a Major: Thirty semester hours consisting of mathematics courses mbered 241 and above; Physics 211, 212, 213, and 214.

Requirements for a Minor: Twenty-one semester hours consisting of mathematics courses mbered 241 and above, and including Mathematics 241 and 242.

thematics 100. Elements of Mathematics. (F) (3)
This course is intended for students with a weak background in high school Algebra who plan on taking other mathematics courses, elementary statistics, business mathematics, computer science, chemistry, or physical science. The course includes a review of the real number system and topics selected from the following: sets, logic, graphs, algebraic equations, ratio and percent, probability, exponents and radicals, logarithms, and the definition of trigonometric functions.

thematics 109. College Algebra. (Sum) (3) (NS)
Basic algebraic definitions and operations; fractions, exponents and radicals; linear and quadratic equations; graphs and functions. (Credit may not be received for both this course and Math 111.)

thematics 111. College Algebra and Trigonometry. (F,S) (4) (NS)
Basic algebraic and trigonometric definitions and operations; fractions; exponents and radicals; linear, quadratic and trigonometric equations; graphs, functions and inverse functions; use of trig tables; radian measure; solution of triangles. *Prerequisite:* High school algebra or equivalent. Does not count toward major or minor. (Credit may not be received for both this course and Math 109.)

thematics 125. Graphic Analysis. (F) (3)
Basic map reading for geologic and topographic maps, scaled drawings, use of planimeter, excavation sections, coal tonnage estimation, methods and procedures of three-dimensional modeling from topographic maps as a basis of engineering calculations.

thematics 203-204. Structure of the Number System. (F,S) (3-3) (NS)
Historical development of the numeration system from an intuitive to a logical approach based upon set theory, definitions of the basic operations on whole numbers and their properties extended to integers, rationals, and irrationals; study of why and how of algorithms for all operations; topics in informal geometry.

Mathematics 211. Basic Statistics. (S)
Basic concepts of descriptive and inferential statistics. Illustrations of applications in t fields of education, business, sociology, psychology, and natural science. *Prerequisi* Mathematics 109 or 111, or permission of the instructor.

Mathematics 232. Surveying. (S)
Principles, calculations, and field practice in surveying, measuring distances and elevatio stadia method, map reading, land areas, care and use of instruments. *Prerequisi* Mathematics 109 or equivalent, or permission of the instructor.

Mathematics 241. Intro. to Calculus and Analytic Geometry. (S) (4) (N
Inequalities, the straight line, conic sections, limits, the derivative, differentiation algebraic functions, applications of the derivative, extrema, and the antiderivative. *Pre quisite:* Mathematics 111 or permission of instructor.

Mathematics 242. Intermediate Calculus and Analytic Geometry. (F) (4) (N
The integral, applications of the integral, logarithmic and exponential functior trigonometric functions, hyperbolic functions, techniques of integration, L'Hospital's Ru and indeterminate forms, and improper integrals. *Prerequisite:* Mathematics 241.

Mathematics 243. Advanced Calculus and Analytic Geometry. (S) (4) (N
Topics selected from polar coordinates, vectors, solid analytic geometry, partial differenti tion, multiple integration, infinite series, and differential equations. *Prerequisi* Mathematics 242.

Mathematics 331. Introduction to Linear Algebra. (F) (3) (N
Vector algebra in Euclidean spaces, lines and planes in space, matrices and linear equation groups, and rings. *Prerequisite:* Math 111 and the permission of the instructor. (Odd yea only.)

Mathematics 332. Linear Algebra. (S) (3) (N
Vector spaces, subspaces, linear independence, linear transformations, determinants, inn product spaces, orthogonality, and unitary transformations. *Prerequisite:* Mathematics 33 (Odd years only.)

Mathematics 372. Probability and Mathematical Statistics. (F) (3) (N
Theoretical probability using point set approach, probability as a frequency ratio; probabili for finite sample spaces; conditional probability; joint and continuous distribution binominal distribution; Baye's theorem; statistical applications of probability; theory sampling and variance. *Prerequisite:* Mathematics 242, which may be taken concurrently, an permission of the instructor. (Even years only.)

Mathematics 402. Functions of a Complex Variable (on demand) (S) (3) (N
Complex numbers, analytic functions, elementary functions of a complex variable, Cauchy' formula, Liouville's theorem, Laurent's series, residues, contour integration, conformal map ping, physical applications. (Even years only.)

Mathematics 403. Introduction to Analysis. (on demand) (F) (3) (N
Sets and functions, topological ideas, LUB property, real sequences, continuity, mean valu theorems, integration, definite integrals, Taylor's theorems, improper integrals, convergenc of infinite series, power series, improper integrals with parameter. (Even years only.)

Mathematics 471. Differential Equations. (S) (3) (N
Differential equations of first order and first degree, differential equations of first order an higher degree, differential operators and linear differential equations, reduction of orde *Prerequisite:* Mathematics 242. (Even years only.)

Mathematics 495. Independent Study. (F,S) (3
Independent work on topics selected to meet the student's needs. For Mathematics major only.

PHYSICS

Requirements for a Major: Thirty semester hours consisting of physics courses numbered 21 and above, including Physics 211, 212, 213, and 214. Science cognates consist of Chemistry 111 112, 131, 132, and General Science 471.

Requirements for a Minor: Twenty-one semester hours of physics courses numbered 211 an above, including Physics 211, 212, 213, and 214.

Physics 101. Survey of Physics. (F) (3) (NS
A descriptive introduction to physics covering some of the ideas of modern physics. Scien tific theories, speed of light, energy, wave motion, heat engines, electromagnetic spectrum nuclear energy, beyond the solar system.

hysics 103. Survey of Physics Laboratory. **(F) (1) (NS)**
Experiments and activities that illustrate basic principles of physics and develop laboratory skills. Experiments are coordinated with Physics 101.

hysics 110. Fundamentals of Physics. **(S) (3) (NS)**
Mechanics of motion and equilibrium; properties of solids, liquids and gases; thermal phenomena; wave motion; electricity and magnetism; optics, topics in modern physics. *Prerequisite:* Mathematics 111, which may be taken concurrently.

hysics 112. Fundamentals of Physics Laboratory. **(S) (1) (NS)**
Laboratory experiments in physics that illustrate basic principles and develop laboratory skills. Experiments are coordinated with Physics 110.

hysics 211-212. General Physics. **(F,S) (4,4) (NS)**
Mechanics of solids, liquids and gases; laws of thermodynamics; kinetic-molecular theory, vibrating bodies; wave physics; laws of Coulomb, Faraday, Ampere, Ohm, Joule, and Lenz; electromagnetism; optics; photoelectric and Compton effects; nuclear energy; relativistic effects. *Prerequisite:* Mathematics 241.

hysics 213-214. General Physics Laboratory. **(F,S) (1,1) (NS)**
A general physics laboratory course involving experiments in mechanics, heat, sound, electricity, magnetism, optics and modern physics. Experiments are coordinated with Physics 211-212.

hysics 301. Principles of Modern Physics. **(F) (3) (NS)**
Special relativity, elementary concepts of quantum mechanics, selected topics in atomic and nuclear physics. *Prerequisites:* Physics 212 and Mathematics 242.

hysics 310. Statics. **(S) (3) (NS)**
Study of force systems on bodies at rest. Applications of conditions of equilibrium to coplanar and space systems. Virtual work, centroids, moments of inertia, and products of inertia. *Prerequisite:* Physics 211.

hysics 311. Heat and Thermodynamics. **(F) (4) (NS)**
Thermodynamic systems and processes, equations of state, PVT surfaces of real substances, laws of thermodynamics, energy equations, enthalpy, entropy, and thermodynamic potentials, applications of thermodynamics to simple systems, kinetic theory. *Prerequisites:* Physics 212, and Mathematics 242.

hysics 312. Electricity and Magnetism. **(on demand) (4) (NS)**
Electric charges, forces, field and potential with associated magnetic forces and fields; dielectric theory; capacitance, inductance, resonance, oscillations; series, parallel DC and AC circuits; measuring instruments; Maxwell's equations and electromagnetic waves. *Prerequisite:* Physics 212.

hysics 411. Dynamics. **(on demand) (3) (NS)**
Motion of a particle, systems of particles, rigid bodies; moving coordinate systems; Lagrange's equations; small oscillations. *Prerequisites:* Physics 212 and Mathematics 242.

hysics 412. Physical Optics. **(on demand) (4) (NS)**
Wave propagation and superposition; interference, diffraction, absorption, dispersion, polarization, double refraction, interaction of radiation with matter, laser theory; theory of selected optical instruments. *Prerequisite:* Physics 212.

hysics 495. Independent Study. **(F,S) (3)**

RADIOLOGIC TECHNOLOGY

A joint program in Radiologic Technology has been developed between Union College and ineville Community Hospital. The program consists of 21 months of course work in math, cience, and liberal arts at Union College and clinical work and professional courses in adiologic technology at Pineville Hospital. Upon completion of this part of the program, tudents will receive the A.S. degree in Radiologic Technology, and begin a six-month internship t Pineville Hospital. At the completion of the internship period, the students are eligible to write he National Registry Examination for certification as Registered Radiologic Technologists.

This program is open to a limited number of students. Applicants to the program must have wo units of high school science and two units of high school math. An interview with the faculty in radiology is required for admission to the program.

NOTE: This program is inactive during 1983-84.

Curriculum—Radiologic Technology

		Fall	January	Spring
Freshman Year				
English 111, 112	Freshman Composition	3		3
Health 340	Anatomy and Physiology	3		
Biology 151	Medical Terminology	2		
Rad. Tech. 100	Intro. to Radiologic Technology (PH*)	1		
Rad. Tech. 111, 112	Principles of Rad. Exposure I, II (PH)	2		4
Rad. Tech, 121, 122, 123	Rad. Positioning I, II, III (PH)	2	2	3
Mathematics 111	Algebra and Trigonometry			4
Electives**		3		3
Summer				
Rad. Tech. 215	Radiation Protection			1
Rad. Tech. 220	Special Rad. Procedures			2
Rad. Tech. 224	Radiation Therapy			1
Rad. Tech. 225	Nuclear Medicine			2
Sophomore year				
Physics 111, 112	Elements of General Physics	3		3
Physics 213, 214	General Physics Lab.	1		1
Rad. Tech. 213, 214	Principles of Rad. Exposure III and IV (PH)	4		2
Rad. Tech. 232	Rad. Positioning IV (PH)	5		
Rad. Tech. 201	Departmental Administration (PH)			1
Rad. Tech. 227	Survey of Diseases (PH)			1
Rad. Tech. 211	X-Ray and Radium Physics (PH)			2
Elective**		3		3

Internship—25 weeks (PH)

Rad. Tech. 100. Intro. to Rad. Tech. **(F) (1)**
A brief history of the radiologic profession, the basic conduct and ethics of a radiologic technologist, and fundamentals of radiation safety and protection. The course includes a description of hospital office procedures and the administrative organization.

Rad. Tech. 111. Principles of Exposure I. **( ) (2)**
An examination of the theory of x-ray technique and radiographic accessories necessary to produce safe levels of radioactive energies for radiographs. The course includes the developmental process necessary to produce artifact-free radiographs.

Rad. Tech. 112. Principles of Exposure II **(S) (4)**
The controlled use of radiation-producing equipment. The essentials of the radiograph and image formation. Studies relative to the formulation and use of technique charts. The course will include film critique.

Rad. Tech. 121. Radiographic Positioning I. **(F) (2)**
A study of body planes and positions. Anatomy and the positioning technique used to demonstrate the anatomical part to be radiographed with emphasis on the extremities, skull, chest, and abdomen. Emphasis will be placed on the surface and marks used to localize body organs.

Rad. Tech. 122, 123. Radiographic Positioning II, III. **(Jan,S) (2,3)**
A continuation of Radiologic Technology 121; emphasis on digestive system, urinary system, and procedures using contrast media.

Rad. Tech. 201. Departmental Administration. **(S) (1)**
A description of the planning and operation of the Radiology Department. Particular emphasis is placed on work flow, scheduling, inter- and intra-departmental relationships and communication.

Rad. Tech. 211. X-Ray and Radium Physics. **(S) (2)**
A study of the fundamental laws of magnetism and electricity as applied to the production of x-rays.

---

*Taken at Pineville Hospital.

**General Studies electives of which 6 hours must be selected from the Humanities and 6 hours from the Social Sciences, of which one course must be Psychology 111.

ıd. Tech. 213. Principles of Exposure III. (F) (4)
Detailed application of x-ray technique and introduction to radium physics. Study of the radiographs produced by the controlled use of radium.

ıd. Tech. 214. Principles of Exposure IV. (S) (2)
A detailed study and critique of the radiographs produced. Independent work from the students will be expected.

ıd. Tech. 215. Radiation Protection. (Sum) (1)
Instruction in the benefits and hazards of radiographic equipment and proper use of protective devices.

ıd. Tech. 220. Special Radiographic Procedures. (Sum) (2)
This course is concerned with special radiographic and surgical equipment employed in the highly technical investigation of internal conditions. This area of study will include field trips to x-ray departments that have special equipment.

ıd. Tech. 224. Radiation Therapy. (Sum) (1)
The use of radiation and radioisotopes sources used for the cure and palliative treatment of disease. Portions of the course will be presented at the University of Kentucky.

ıd. Tech. 225. Nuclear Medicine. (Sum) (2)
A specialized field in the use of radionuclides for diagnosis and therapy. This course will contain didactic material plus clinical experience in the Nuclear Medicine Department at Pineville Hospital. Intended to familiarize the student with this rapidly expanding area of medicine.

ad. Tech. 227. Survey of Diseases. (S) (1)
Nursing procedures and techniques used in the general and special care of sick and injured patients in the Radiology Department.

ad. Tech. 232. Radiographic Positioning IV. (F) (5)
A continuation of Radiologic Technology 123 with emphasis on radiographic examination of the thorax and spine.

COAL MINING TECHNOLOGY

Union College offers Coal Mining Technology curricula both for a two-year, Associate of Applied Science degree, and a minor in a four-year Bachelor of Science degree program. The Coal Mining Technology Program is designed to provide students with the technical skills and knowledge that will qualify them for jobs or enable them to advance their careers in the coal mining industry.

Courses in mathematics, science, communications, graphics, and surveying, along with courses especially designed for the Coal Mining Technology Program will give the Union College Coal Mining Technology graduate a solid background in surface and underground mining and the preparation and analysis of coal.

The Coal Mining Technology curriculum was developed in part by an advisory board of mining industry representatives. Their input insures that the Union College Coal Mining Technology Program meets the needs of the coal industry and that students who graduate from the program will have the training they need for jobs in the coal industry.

The following are the requirements for the two-year program leading to the Associate of Applied Science degree in Coal Mining Technology:

Common Courses Required of All Candidates		*Semester Hours*
English 111 & 112	English Composition	6
Math 109	College Algebra	3
Math 125	Graphics Analysis	3
Env. Studies 113	Geology of Coal	3
Bus. Ad. 352	Principles of Management	3
Coal Tech. 111	Introduction to Coal Mining	3
Coal Tech. 112	First Aid & Safety	3
Coal Tech. 220	Mining Economics	3
Coal Tech. 246	Dust, Noise, and Illumination	3
	Humanities General Requirement	3
	Social Science General Requirement	3
	TOTAL	36

Emphasis Course to Complete AAS Degree

The student is encouraged to concentrate in one of the following emphases:

		Undergr'nd Mining	Surface Mining	Preparation Plant	Coal Lab Technician
Coal Tech. 121	Underground Mining and the Law	3			
Coal Tech. 122	Surface Mining and the Law		3		
Coal Tech. 235	Coal and Water Analysis	3	3	3	
Coal Tech. 240	Fundamentals of Roof Control	3			
Coal Tech. 241	Mine Gases and Ventilation	3			
Coal Tech. 242	Surface Mining Methods		3	3	
Coal Tech. 243	Explosives and Blasting		3		
Env. Studies 244	Reclamation and Land Use		3	3	3
Coal Tech. 245	Underground Mining Methods	3		3	
Coal Tech. 248	Coal Preparation I			3	3
Coal Tech. 249	Coal Preparation II			3	
Coal Tech. 285	Field Experiences in Coal Tech.*	6	6	6	
Chem. 111-131	General Chemistry				4
Chem. 112-132	General Chemistry				4
Chemistry 212	Quantitative Analysis				4
Chemistry 361	Coal, Water, and Soil Analysis				5
Math. 232	Surveying	3	3		
	Free Electives	6	6	6	6
	TOTAL	30	30	30	29

Requirements for a Minor in Coal Mining Technology: Union College also offers a minor in Coal Mining Technology as part of a four-year, Bachelor of Science degree program. It enables students in business, science, the health professions, and other fields to take courses that will complement their chosen professions and better prepare them for careers in the coal industry or in allied fields.

Requirements consist of twenty-one semester hours in Coal Mining Technology, including Coal Technology 111, 112, 121, or 122, and Mathematics 125. The remaining nine semester hours should be selected in consultation with the student's advisor so as to meet his/her career goals.

Coal Tech. 111. Introduction to Coal Mining. **(F) (3)**
Principles and practices of surface and underground mining, methods, equipment, field trips, miner responsibilities, safety practices. (Part 1 of training for inexperienced miners—surface and underground.)

Coal Tech. 112. First Aid and Safety. **(F) (3)**
Instruction in MSHA approved first-aid procedures for all types of accidents, CPR training, and principles of accident prevention. (Part II of training for inexperienced miners—surface and underground.)

Coal Tech. 121. Underground Mining Law. **(S) (3)**
A study of underground mining laws and their relationship to mine management and operation. MSHA Health & Safety Regulation.

Coal Tech. 122. Surface Mining Law. **(S) (3)**
A study of surface mining laws and regulations and their relationship to mine management, development, and operations.

Coal Tech. 220. Mine Economics. **(S) (3)**
Introduction to the operational cost of mining (surface and underground) in the following areas: Engineering, equipment, taxes, fees, royalties, transportation, office management, MSHA, OSM, preparation plant, and coal market.

Coal Tech. 235. Coal and Water Analysis. **(S) (3)**
A study of the chemical properties of coal and water, and an introduction into analytical principles, sampling methods, and statistical treatment of data used in coal and water laboratories. *Prerequisite:* Math 109 or consent of instructor.

Coal Tech. 240. Fundamentals of Roof Control. **(F) (3)**
A study of stress factors on roofs, types of roof bolts, machinery, types of mine roofs, testing and controlling roofs, and roof control plans.

*Students who have had a year or more experience in their area of emphasis will not be required to do the Field Experience and will be allowed to substitute, with the director's permission, 2 courses from the emphasis courses.

oal Tech. 241, Mine Gases and Ventilation. (F) (3)
Mine Gases: Physical and chemical properties of mine gases, effect on miners, gas detection devices, and safety procedures. Ventilation: Methods, ventilation devices, required air movement, ventilation plans, and effect on mine gases.

oal Tech. 242. Surface Mining Methods. (F) (3)
A study of the principles and practices of surface mining. Topics: Surface mining methods, matching method to topography, equipment, and mining regulations.

oal Tech. 243. Explosives and Blasting. (F) (3)
Methods of using explosives and the latest techniques in blasting for both surface and underground. Safety and economy will be emphasized. *Prerequisite:* Math 100 or equivalent, or consent of instructor.

oal Tech. 245. Underground Mining Methods. (S) (3)
A detailed study of the methods of underground mining: matching equipment to mining situations, mine designs for safety and efficiency, coal seams—locations and physical and chemical properties, new technology. *Prerequisite:* Coal Tech. 240 or 241.

oal Tech. 246. Dust, Noise, and Illumination. (S) (3)
A study of dust, noise, and illumination problems in a mining situation. The following will be discussed under each category: history of regulations, reasons for health standards, physical properties, instruments and methods of use.

oal Tech. 248. Coal Preparation I. (F) (3)
A study of the various aspects and methods of coal preparation including sampling, washing, crushing, the science of separation processes such as dense-media and froth flotation, refuse removal and disposal.

oal Tech. 249. Coal Preparation II. (S) (3)
A continuation of Coal Preparation I. Topics: Flocculation and centrifugal separation, dewatering and drying, dedusting and chemical treatment, conveyors, pumping, motors, auxiliary equipment, economics. *Prerequisite:* Coal Technology 248.

oal Tech. 285. Field Experience in Coal Technology. (F,S,Sum) (6)
A directed field experience in some phase of coal mining with consideration given to the needs and interests of the student. Students with prior experience may elect to substitute 2 Coal Technology emphasis courses, with permission of the director. *Prerequisite:* Coal Technology 111 and 112 or equivalent and 15 hours credit.

Division of Social Sciences

L. James Cox, *Chairman*
Behavioral Sciences, Psychology, Sociology,
History, Geography, Political Science, Appalachian Studies,
and the Appalachian Semester

BEHAVIORAL SCIENCES

The two departmental courses listed below are "core" courses in the Behavioral Sciences cu riculum. Both courses are required as a part of the Psychology, Sociology, and Social Wo majors and minors.

Behavioral Sciences 245. Statistics for the Behavioral Sciences. (S) (
An introductory course to prepare students to better understand the scientific analysis psychological and sociological phenomena. Concepts and principles of descriptive and i ferential statistics.

Behavioral Sciences 341. Methods of Behavioral Sciences Research. (F) (
Techniques of behavioral sciences research, including survey design and the collectio analysis, and interpretation of data. Lecture and laboratory.

PSYCHOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 34 Psychology 111, 210, 361, 452 and 460.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 24 341, Psychology 111, 210, and 361.

Psychology 111. Introduction to Psychology. (F,S) (3) (S
Emphasis on the study of human behavior and the ability of the individual to make a justments to his environment.

Psychology 210. Child Development. (S) (3) (S
Emphasis on recent child development theories with laboratory experiences with children c a one-to-one basis.

Psychology 361. Psychology of Learning. (F) (3) (S
Basic concepts and principles of learning with emphasis upon human and animal laborato studies.

Psychology 402. Counseling Theories and Techniques. (F) (
Basic theories, types, and techniques of counseling. Practice in individual and group techr ques of interviewing. Permission of the Department Head required.

Psychology 411. Educational Psychology. (F) (3) (S
Basic concepts related to mental development, appraisal and diagnosis, and learning theor applicable to educational practices.

Psychology 430. Social Psychology. (S) (3) (S
Major emphasis is on problems involved in human relations. Designed to help the individua to understand and adjust to group thought and action. Attention is given to recer psychological and sociological research in human relations.

Psychology 431. Mental Hygiene. (on demand) (
Factors determining the development of personality, principles of mental health, an problems involved in the dynamics of human adjustment.

Psychology 452. Abnormal Psychology. (S) (
Mental disorder, changing conceptions of normality, the more common forms of menta disorders, their psychological interpretation, principles of effective mental hygiene, and cor temporary approaches to psychotherapy.

Psychology 460. Theories of Personality. (F) (3) (S
Nature of personality structure and dynamics. Classical psychoanalysis, socia psychological, and stimulus-response theories included.

Psychology 461. History and Systems of Psychology. (on demand) (3) (S
Origins of psychological thought within science and philosophy, tracing the development o systems and theories within German, British, and American psychology.

ychology 470. Theories of Learning. **(S) (3) (SS)**
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

ychology 495. Independent Study. **(F,S,Sum) (1-3)**

OCIOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, ciology 131, 460. Psychology 430 is strongly recommended and will be credited toward the rty semester hour requirement.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 1, Sociology 131. Psychology 430 is strongly recommended and will be credited toward the enty-one semester hour requirement.

ciology 131. Introduction to Sociology. **(S) (3) (SS)**
The social interaction of persons and groups; man's cultural heritage and social nature; analysis and principles of group life; forms of collective behavior; the process of socialization; social structure, interaction and reorganization, including race relations and social class; a variety of social institutions; the family, education, religion; the economy and politics; social change. Students taking this course cannot also receive credit for Sociology 141.

ciology 141. Introduction to the Sociology of Appalachia. **(F) (3) (SS)**
Introduces students to the basic tenets of Sociology using Appalachia as the sociologic base. The areas of study include socio-economic class, culture, folklore, social institutions, the family, religion, schooling, poverty, development and unionization of Appalachia. Students taking this course cannot also receive credit for Sociology 131.

ciology 221. Introduction to Anthropology. **(on demand) (3) (SS)**
A survey of the archaeological and biological history of mankind as it relates to the development of man in his culture, with comparisons drawn between the cultures of primitive people and Western Civilization.

ciology 251. Current Socio-Economic Problems. **(F) (3) (SS)**
Scientific understanding of social problems; problem areas in contemporary American society; types of personal disorders and role impairment; the influences of social change on the structure of society. Attention is also given to the question of why certain forms of deviance become defined as social problems.

ciology 255. Selected Topics in Political Sociology. **(on demand) (3) (SS)**
A series of seminars and small group discussions organized around a set of case readings in the area.

ciology 271. Marriage and the Family. **(S) (3) (SS)**
Background experiences in the lives of young people leading up to courtship and marriage; the establishment and functioning of the home, with related biological and social factors. Emphasis upon changing attitudes toward family relationships, some of the problems involved, and suggested solutions.

ciology 311. Human Ecology. **(S) (3) (SS)**
Population distribution, growth, composition, and its relevance to current economic, social, and political problems. (Odd years only.)

ciology 345. Appalachian Semester Orientation Seminar. **(F,S) (3) (SS)**
An introduction to Appalachian culture. Open only to students participating in the Appalachian Semester.

ciology 349. Economics of Appalachian Poverty. **(F,S) (3) (SS)**
A theoretical and empirical study of the economics of poverty in Southern Appalachia with special emphasis on the major economics bases; including an examination of pertinent historical and geographic characteristics. Open only to students participating in the Appalachian Semester.

ciology 353. Minority Groups. **(on demand) (3) (SS)**
A social scientific study of the origin and organization of minorities and their effect on society, with particular emphasis on minorities in the United States.

ciology 371. Social Institutions. **(F) (3) (SS)**
An examination of the structure and function of social institutions, with primary orientation within the American milieu. Particular emphasis on socialization, stratification, social change, and relations among institutions. (Odd years only.)

Sociology 421. Rural and Urban Sociology. (F) (3) (SS
Comparative and interrelated study of urban and rural life considering physical, institutiona social and economic factors of modern life in cities and in the countryside.

Sociology 422. Social Institutions in Appalachia. (F,S) (3) (SS
A theoretical and empirical analysis of the cultural and social characteristics of the Ap palachian Region from an institutional point of view. Open only to students participating i the Appalachian Semester.

Sociology 431. Socio-Economic Development in the Third World. (F) (3
This course introduces students to the problems of development in the Third World. Th areas of focus will be: what is the Third World; models of development; nationalism, im perialism, and human rights. The course is interdisciplinary in nature with much of the em phasis economic, historical, and sociological. (Odd years only.)

Sociology 435. Labor Relations in Appalachia. (on demand) (3) (SS
The restricted focus of this seminar will be an analysis in historical and contemporar perspectives of labor relations in central and southern Appalachia. While some attention wil be given to various manufacturing activities including chemicals, clothing, furniture, brick making, and iron-making, emphasis will center upon work relations in coal and textile com munities.

Sociology 460. Sociological Theory. (F) (3) (SS
The major theories which have proved useful in investigating the nature of society are ex amined as cultural products, ideologies, and scientific models. Special attention is given t major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokir in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

Sociology 461. Criminology. (S) (3) (SS
Explicate and analyze the relationship of crime to the larger social structure, the community and the individual. Develop an understanding of some of the more significant social and political implications of the study of crime, aid the student in comprehending the importan contemporary issues such as the role of the state and the citizen in the suppressing of crime incarceration, and crimes of the powerful.

Sociology 495. Independent Study. (on demand) (1-3

PRE-LAW

Most law school admissions committees require a student to have a four-year college pro gram leading to the Bachelor of Arts or Bachelor of Science degree plus an acceptable score o the Law School Admissions Tests. Majors may be in any area although most students tend t take business or social science majors of some type. Students may also elect an individualize major (See Special Programs Section) to prepare themselves for law school. Regardless of th major, elective hours in accounting, business, history, political science, philosophy, and Englis prove helpful.

HISTORY

Requirements for a Major: Thirty hours of history including History 130, 131 and 200. At leas 12 hours must be U.S. History and 12 hours must be non-U.S. History.

Requirements for a Minor: 21 semester hours in history; including History 130 and 131. At leas 9 hours must be in U.S. History and 9 in non-U.S. History.

History 101. United States History to 1865. (F) (3) (SS
A survey of American history through the Civil War, tracing the development of the American nation. Stress is placed on the nature of Colonial society; the American Revolution; the crea tion of a national government; the influence of Jackson, and the Civil War.

History 102. United States History since 1865. (S) (3) (SS)
A survey of American history to present times tracing the rise of America as a world power. Emphasis is on the changes of industrialization; the loss of civil rights; protest and reform; the Depression; and American influence in the world.

History 130. Survey of Western Civilization: Ancient through Medieval. (F) (3) (SS)

History 131. Survey of Western Civilization: Renaissance to Present. (S) (3) (SS)

History 200. Historical Research and Methods. (F) (3)
Gathering and criticism of data; bibliographies and aids; problems in historiography, com-

position analysis, and the final monograph. History majors should take this course in their sophomore year.

History 233. History of Appalachia. **(Sum,F) (3) (SS)**
A survey of the region from settlement to the present time. The course focuses especially on the impact of the frontier experience, the Civil War and industrialization. "How is Appalachia both alike and different from the rest of America?" is a major question addressed by the course.

History 241. American Economic History. **(S) (3) (SS)**
Examination of the economic forces shaping the development of the American Nation. Topical consideration of mercantilism; the rise of capitalism; slavery; the shocks of industrialization; the New Deal and the economy; and criticism of American economic power and capitalism. (Even years only.)

History 311. United States Colonial and Revolutionary Eras (1600-1815). **(F) (3) (SS)**
An examination of the conflicting historical interpretations of these eras. Topics emphasized will be Puritanism; Colonial society; reasons for the Revolution; the meaning of the Constitution; and the nation's early problems. (Odd years only.)

History 312. Jacksonian Era & the Civil War (1815-1865). **(S) (3) (SS)**
Emphasis on the conflicting historical interpretations of Jacksonian America and the Civil War. Topics include the Second Political Party System; slavery; expansion; and the cause of the Civil War. (Odd years only.)

History 313. Industrial America (1865-1919). (F) (3) (SS)
A consideration of the conflicting historical interpretations of the period. Topics emphasized include the loss of Civil Rights; the nature of the Gilded Age; Populist and Progressive Reforms; and World War I. (Even years only.)

History 323. Latin America. **(on demand) (3) (SS)**
A survey of Latin American history from the discoveries by Columbus to the present with the major emphasis on Mexico and the Caribbean.

History 330. Renaissance and Reformation: Europe (1350-1648). **(F) (3) (SS)**
An examination of historical transition from feudalism to primitive capitalism, from political localism to national monarchy, from religious life to secular life. (Even years only.)

History 331. Early Modern Europe (1648-1815). **(S) (3) (SS)**
A theoretical and historical appreciation of the birth, development and implications of the following institutions: mercantilism and merchant capitalism, the birth of the nation-state, the emergence of political democracy, European global expansion and early industrial society. (Even years only.)

History 332. Modern Europe. **(S) (3) (SS)**
Emphasis on the dual revolutions in Europe, industrial and political, and European and global implications: nationalism, socialism, liberalism, and communism.

History 345. American Constitutional History: Civil and Political Rights. **(F) (3) (SS)**
An examination of the influence of the Supreme Court with primary stress given to political and civil rights. Major consideration is the Modern and Warren Supreme Court. (Even years only.)

History 421. The Middle Period (1821-1850). **(F) (3) (SS)**
A detailed examination of Jackson, politics, and the culture of the period. Stress is placed on reform and the predominance of change in American life, and conflicting interpretations of the period. (Even years only.)

History 442. Britain in the 20th Century. **(S) (3) (SS)**
Britain in a period of economic decline, de-colonization and the resultant crisis for her domestic institutions: social conflict and the response of labor, communications and the struggle for cultural dominance. (Even years only.)

History 446. History of Russia. **(F) (3) (SS)**
Russian History since 1600. Emphasis on the relation of economic development and social class to royal absolution, bureaucratic absolution and the emergence and development of the Soviet State. (Odd years only.)

History 470. Twentieth Century America. **(S) (3) (SS)**
Selected topics on the nation's history since 1900, including the New Deal, Viet Nam, and Watergate. (Odd years only.)

History 495. Independent Study. **(F,S,Sum) (3)**

POLITICAL SCIENCE

Political Science 110. Critical Issues in American Politics and Government. (F) (3) (SS)
A study of selected public policy problems facing Americans in the contemporary politica context.

Political Science 211. American National Government. (S) (3) (SS)
A study of the structure and function of the national government in theory and practice

GEOGRAPHY

Geography 101. Introduction to Geography. (S) (3) (SS)
Emphasis on the concepts of place, region, spatial interaction, landscape interpretation an landscape evolution. Deals with the graphic media of geography—maps, graphs, scal models. Case studies illustrate geographic principles to familiarize students with variou parts of the world. For future teachers as well as students of the natural and social sciences

Geography 241. Geography of Appalachia. (F) (3) (SS)
A systematic analysis of the physical, demographic, economic and cultural characteristics o the Appalachian landscape, with comparative significance for other regions. Includes fiel study.

APPALACHIAN STUDIES

An interdisciplinary minor in Appalachian Studies is available to interested students. Courses involving the study of Appalachia may be found throughout this catalog.

Requirements for a Minor: Twenty-one semester hours chosen from the following: Behavioral Sciences 341 or History 200; Coal Technology 111; Economics 252; Environmental Studies 313 and 469; Geography 241; History 233; Social Work 241; Sociology 141 and 435. Participation in the Appalachian Semester may also be counted toward a minor in Appalachian Studies. Relevant independent study projects and a specialized field practicum are also recommended.

APPALACHIAN SEMESTER

Roy Silver, *Coordinator*

The Appalachian Semester offers mature students a unique educational opportunity to devote their full time to studying the Appalachian region—its strengths, its problems and its challenges. The program's objectives are to promote in-depth awareness and understanding of life in Appalachia from an interdisciplinary approach and to provide an academic setting for understanding and participating in the dynamics of life in the area. This comprehensive academic program, which includes both classroom and field experience, provides 15 semester hours of credit in a variety of disciplines and offers the student the opportunity to become actively involved in a unique part of American society.

The following courses comprise the Appalachian Semester. These courses are open only to students participating in the Appalachian Semester.

Sociology 345. Appalachian Semester Orientation Seminar. (F,S) (3) (SS)
An Introduction to Appalachian culture.

Sociology 349. Economics of Appalachian Poverty. (F,S) (3) (SS)
A theoretical empirical study of the economics of poverty in Southern Appalachia with special emphasis on the major economics bases; including an examination of pertinent historical and geographic characteristics.

Sociology 422. Social Institutions in Appalachia. (F,S) (3) (SS)
A theoretical and empirical analysis of the cultural and social characteristics of the Appalachian Region from an institutional point of view.

287-487. Appalachian Field Practicum. (F,S) (6)
The Appalachian Semester student, in consultation with the director, will develop a specialized field experience. May be taken in any approved discipline. Project will be designed to enhance the student's learning experience and make a positive contribution to the lives of people living in Appalachia.

An introductory knowledge of social studies and permission of the director are prerequisites for enrollment in the program. A course in social work methods or in social research methods is highly recommended as a prerequisite for participants desiring upper division field work credit in social work and sociology respectively.

CAMPUS INFORMATION

Location, Campus and Buildings

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. Cumberland Gap National Historical Park is thirty miles away. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

The county seat of Knox County, Barbourville is served by Greyhound buses enroute to Knoxville, Lexington, Louisville, and Cincinnati. The London-Corbin Airport, approximately thirty miles from the campus, is served by the Piedmont Airlines.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian colonial buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Speed Hall (Administration Building), 1897-1905. A gift from the estate of Mrs. Fanny Speed of Louisville, Ky. Her bequest also partially financed the Classroom Building and Stevenson Hall.

Centennial Hall (formerly the Administration Building.) 1907.

Dramatic Arts Center, (formerly Gymnasium), 1919; remodeled 1965.

Baldwin Place, the home of the President 1925. The gift of Mr. and Mrs. F.E. Baldwin, Elmira, N.Y.

Maintenance Building, 1938, originally equipped by a gift from the estate of Robert Norton, New Albany, Indiana.

Abigail E. Weeks Memorial Library, 1941. Originally furnished by a gift from Mrs. Abbie E. Stewart.

Pfeiffer Hall—Women's Dormitory, 1942. Wing added 1960. The original wing was a gift from the estate of Mr. and Mrs. Henry Pfeiffer, of New York City.

Conway Boatman Chapel and Fine Arts Building, 1949.

College Courts—Residences for married students, 1954. Expanded in 1964.

Religious Life Center, 1975.

Physical Education Building, 1964, including the Swimming Pool, 1957.

Student Center, 1964.

College Park, 1960. Faculty residential area.

Langford Apartments, 1962. Gifts from the estates of Miss Mary Kyle Dugan and Mrs. Mary Gilbert Langford in memory of Mr. and Mrs. George Langford. Housing for faculty and staff.

Mahlon Miller Science Center, 1973.

Publications

Union College Bulletin—An official quarterly bulletin, one issue of which is the catalog number. The bulletin is sent free on request.

Parents' Bulletin—A publication to inform parents of activities on campus.

Orange and Black—A newspaper published by the student body.

Union College Alumnus—A quarterly bulletin published by the Alumni office.

Stespean—The yearbook, published annually by the students of the college.

Student Organizations

Students have the opportunity of participating in and developing leadership through a number of campus organizations. Some of these are departmental, some are limited to honor students in their fields, many are open to all interested students. Each has a faculty sponsor and some include faculty in their membership. The following are official clubs and organizations as approved by the faculty of Union College.

Alpha Psi Omega—A national honorary theatre fraternity. Union's Zeta Chi chapter serves to encourage participation in the college's theatrical activities and to develop larger and better informed theatre audiences.

Appalachian Wilderness Club—A group to explore the outdoors through hiking, camping, and caving.

Association of Women Students—An organization to make girls' dorm life better and let girls actively participate in college functions through their ideas.

Beta Chi Alpha—A cultural society, in the form of a sorority, which attempts to bring beauty, culture, and art to the campus.

Circle-K International—A service fraternity associated with Kiwanis.

Christian Student Fellowship—An organi-

ıtion to bring people from a variety of ıckgrounds, and offer them Christian ellowship and activities that will make their ay at Union conducive to their values and ıristian experience.

CROSS—Campus Registry of Sharing Services; an organization in Campus Ministry ıich provides students, faculty, and staff embers opportunities to volunteer their lents and abilities to the college and surunding communities.

Gamma Beta Phi—A national honor socie- promoting scholarship, leadership, and ɔod citizenship at Union College.

Iota Mu Gamma—An organization to nefit the college by promoting services, llowship and unity.

ta Sigma Nu—An honor society to provide cognition for honor students by uniting em in an organization which encourages gh ideals, promotes diligence in study, and wards excellence in scholarship.

Lighthouse Singers—A volunteer Chrisn chorus which provides musical enterinment to churches and civic organizaɔns throughout Kentucky.

Modern Culture Study Group—A group ıose purpose is to study modern culture th an emphasis on the dramatic arts, rough group discussion, films, readings, d lectures.

Mu Omega Beta—A fraternity promoting llowship, unity, and service to the college mmunity.

Phi Beta Lambda—A national business ganization promoting scholastic achieveent, service to the community, developent of leadership potential, social interacn, and increased awareness of the siness world.

Phi Lambda Sigma—A national honor ciety for Sophomore men and women.

Pi Upsilon Beta—A fraternity promoting llowship, unity, and service to college and mmunity.

Student Center Board—A programming ard providing social and recreational acities to supplement those planned by ıer campus agencies.

Student National Education Associan—A national preprofessional organizan for men and women planning to pursue aching as a career.

Union College Science Society—An ganization to stimulate interest in the tural sciences.

thletics

ion College is a member of the Kentucky Intercollegiate Athletic Conference and of the National Association of Intercollegiate Athletics. The college promotes athletics for physical development and as a vital part of the program of extracurricular activities. The program emphasizes the protection of the best interests of the student athlete. Union teams are noted for "clean" sport and competitive spirit. Sport for fun and character building is fundamental. In intercollegiate competition the college is represented by varsity teams in basketball, swimming, tennis, golf, baseball, soccer and softball.

Women may participate on intercollegiate teams in swimming and tennis, and have earned places on varsity teams in these sports in recent years. Separate women's teams are active in women's basketball and softball and compete against women's teams from other colleges and universities in the area.

Union College sponsors intramural activities in touch football, basketball, free-throwing, horseshoes, badminton, softball, tennis, volleyball, speedball, and field hockey to have a "sports for all" program. The intramural organization is, in general, made up of men's and women's independent teams. The program includes both team and individual sports. No college credit is given for intramurals but everyone is urged to take part.

Student Conduct

Each student is expected to conduct himself at all times according to the rules of good society. This obligation includes compliance with Federal, State and local laws and adherence to college regulations. As members of a free society, students are always free to peacefully and lawfully petition for amendment or modification of the various laws as well as the college regulations. However, the rights of the student body as a whole and the college as an institution of higher education exceed the rights of any individual student or any group of students. Accordingly, not in an attempt to stifle dissent, but rather to perpetuate an environment where the student may peacefully pursue his studies, actions which are disruptive to the normal functions and operations of the college will not be tolerated. Students who are disorderly in conduct, or unmindful of the rights of others, may be required to withdraw from the college.

No student shall possess or use alcoholic beverages when on college property or engage in disorderly conduct in college-approved facilities off campus, or when away from the campus representing the

college in any way; e.g., a participant or spectator at a college athletic event or other college function. Any student violating this regulation may be required to withdraw from the College.

The sale, possession, or use of stimulant, depressant, narcotic, hallucinogenic or other drugs or substances in violation of the Federal, State, or local laws is prohibited. Any student who illegally sells, possesses, or uses such drugs will be subject to criminal prosecution by the appropriate law enforcement agencies and also may be suspended or expelled. It is the announced policy of Union College to cooperate fully with the various law enforcement officials in the enforcement of the drug laws as with all other laws. A student's lawful use and possession of certain drugs pursuant to a valid prescription from a qualified medical practitioner such as a physician, dentist, or optometrist is, of course, permitted.

Firearms of any kind are forbidden in the residence halls or on the campus. Students may be expelled for failure to abide by this rule.

Gambling in any form is strictly forbidden.

Union College expects good housekeeping from all on-campus resident students. Persons who persist in lack of good housekeeping will be asked to withdraw from residence on the campus. The college reserves the right to enter and inspect the rooms of students at any time.

The Student Code defining procedures for dealing with academic dishonesty is found in the student handbook.

Social Life

Students are encouraged to accept every legitimate opportunity to engage in social functions. The faculty emphasizes the value growing out of well-directed social activities. Student organizations, the faculty and local churches make desirable contributions to the promotion of social life. The Director of Student Activities is responsible for the initiation and direction of a comprehensive program of student social and recreational activities. All social functions are subject to rules and regulations of the college.

Automobiles

Automobiles parked on campus must be registered in the Business Office. All must display a legible parking permit sticker. The annual registration fee is $2.00. Stickers should be displayed on the rear bumper of the car on the driver's side. Cars should be parked in the assigned lots as designated b the Traffic Control Officer. Parking for th handicapped provided.

Health Service

Union College students receive health se vice and advice from the County Health O fice in Barbourville. Since the college doe not have facilities for taking care of pr tracted illness, arrangements for hospitaliz tion must be made by the student or hi parents. When a physician is needed the stu dent may request the dormitory counselor t call one, whose fee is paid by the student. I case of emergency, the college reserves th right to employ a physician or to have a stu dent hospitalized without consent of th parents. All full-time students are encou aged to secure coverage of an acciden sickness, and hospitalization plan if ade quate insurance is not available through family plan at home. All claims under stu dent insurance plans are filed by the studen and the attending physician and not b Union College.

Campus Housing

Stevenson Hall for men and Pfeiffer Ha for women permit single or double room oc cupancy. Twenty apartments are availabl for married students. All residents of Stever son Hall, Pfeiffer Hall, and College Court are required to sign housing contracts Residents in the dormitories are required t purchase meal tickets for the colleg cafeteria.

Students are expected to obey terms o their housing contract. A facsimile appear in *Union and You,* the student handbook.

The dormitories are closed during vaca tion periods. Students will not be allowed t remain in dormitories during vacation. Th Dean of Students assists students who mus remain in Barbourville for full-time work study or student teaching in finding suitabl off-campus housing.

No student will be issued a room key unless he or she has previously signed a housing contract. Keys must be returned by the last day of the term of this agreement o of the student's use of the accommodations whichever occurs first. Any student failing t return a key will be charged $10.00 to cove the cost of changing the lock for the security of persons subsequently permitted the use of the accommodations.

Library and Learning Resource Center

The Abigail E. Weeks Memorial Library houses a collection of approximately 80,000 volumes. More than 350 periodicals are regularly received, along with indexing services to facilitate their use. It is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the library, and freshmen students are given instruction in the use of its facilities. In addition, the college houses a special Lincoln Civil War collection containing over 1,000 volumes, a curriculum library for the Department of Education, and a music library with a collection of more than 3,500 recordings and musical scores.

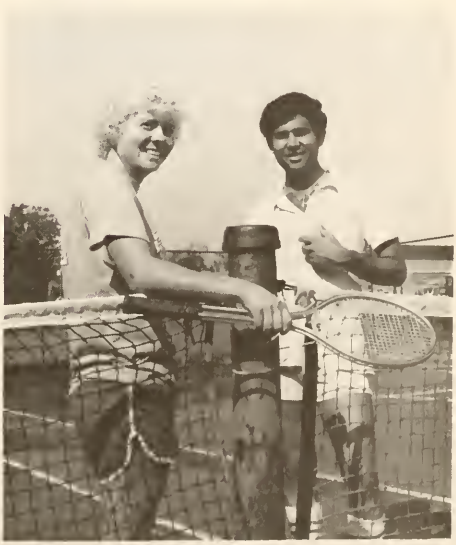
The Learning Resource Center supplements the printed materials of the Library with a broad range of non-print media, including slides, audiotapes, videotapes, filmstrips and kits. The most recent hardware acquisitions include two small desktop computer systems which are available for use by students and faculty. In addition to providing educational materials for classes and individualized instruction, the Center offers production services such as graphics, photography, and special media presentations. LRC staff also instruct students and faculty in the use of equipment and materials.

Religious Life

Union College takes seriously its identity as a church-related institution, and is concerned that its students grow in their awareness of the value of a vital Christian faith, as well as in their awareness of academic excellence. In this concern, Union College seeks to be faithful to John Wesley's affirmation that a whole person is one who unites knowledge with vital piety.

Worship and other religious services are held on campus twice weekly, are ecumenical in nature, and utilize the talents of the campus minister and other clergy, faculty and students. A vespers service, a prayer breakfast, and an open-house, which provides a setting for informal discussion of and sharing opinions about issues which are of interest to students who are seeking to grow in their understanding of Christianity, are held weekly. Celebrations of the Lord's Supper are held regularly. In addition, the Religious Life Center, in the heart of the campus, provides a setting for informal worship, study, discussion, and fellowship. The Willson-Gross Lectures, the Staley Lectures, and the "Faith and Life Week" seek to bring outstanding speakers to the campus to discuss the Christian faith. The Religious Life Committee, composed of students, faculty, and local clergy, works with the Campus Minister as an advisory group to insure that the religious life programs meet the needs of the students and campus community. From time to time, various individuals, groups, music ensembles, and films are scheduled to enrich both the religious and cultural life of the college community.

Students are encouraged to worship regularly in the church of their choice and to participate in the various denominational and faith-oriented groups on campus and in the community.



STATEMENT OF PURPOSE
(Mission Statement)

Union College is an independent institution of higher education affiliated with the United Methodist Church. It is dedicated to maintaining an academic environment that stimulates intellectual curiosity and scholastic competence, encourages an understanding of and commitment to the Christian faith, and undergirds the development of the whole person, so that students will develop the human resources needed to live creatively and wholesomely in a changing world.

Students are admitted to Union College without regard to race, creed, age, sex, or physically handicapping condition. Although eastern Kentucky and the general mid-Appalachian region constitute the primary service area of the college, it is intended that a balance will be maintained by enrolling applicants from across the nation and around the world.

Union College is committed to providing a faculty characterized by sound scholarship, stimulating teaching, exemplary character, and a deep concern for the needs of students. Classes are small, many teaching and learning options are provided, and opportunities for both professional and informal counseling and guidance are abundant.

Union College desires to provide a broad academic program to meet a wide variety of student and social needs and interests. The basic undergraduate liberal arts program of the college provides opportunities for preparation in the professions as well as general education in the humanities, arts, social studies, and sciences. Union College also has curricula at the certificate, associate degree, and graduate levels. These latter curricula are closely coordinated with regional manpower needs. Credit and non-credit continuing education offerings are available for persons seeking skills and/or desiring personal enrichment. Classes in all categories are offered on demand in various communities within the primary service area of the college in order to provide maximum convenience and minimum cost for students.

Union College affirms a special concern for improving the quality of life in Appalachia. The academic program provides undergraduate and graduate curricula in education that contain elements designed to address the unique needs of the public schools in the region. Appalachian regional studies make available to all interested students a basis for understanding the history and distinctive features of the region. The college's community service programs provide both on-campus and off-campus instruction in a variety of subjects for the educationally disadvantaged at the pre-college level as well as non-credit continuing education classes for the community at large.

In order to further the development of a free society of responsible individuals, Union College is committed to student involvement in institutional governance as an aid to the development of responsibility and leadership capabilities. Through student outreach programs a philosophy of life is encouraged that has a significant place for using one's time, talents, and resources in voluntary service activities.

A STATEMENT OF VALUES

Union College is dedicated to preparing students for living informed, socially useful, personally fulfilling, and spiritually vital lives. This commitment involves using knowledge within a context of Christian values. Although it is recognized that as an educational institution Union College has an obligation to help students understand other value systems and their effects when translated into specific areas of human activity, as a United Methodist Church-related college Union affirms an institutional stance based on Christian values such as have evolved in the Judeo-Christian tradition and are contained in the Old and New Testaments. Our intent is both to confess and to practice the Christian faith in all our endeavors.

IMPLICIT IN THIS STATEMENT OF VALUES IS THE REQUIREMENT THAT UNION COLLEGE COMMIT ITSELF TO THE VALUES ENUNCIATED BY ASSURING TO THE MAXIMUM EXTENT POSSIBLE:

To Its Students

(1) the fullest of opportunities to receive a quality liberal arts education.
(2) strong attention to, and genuine concern for, each individual in the college community, including emphasis upon the unique value of each person.
(3) a continuing concern that they learn to appreciate and accept life styles that reflect integrity, honesty, compassion, and social responsibility.
(4) a commitment to provide the experiences necessary to acquire a meaningful understanding of and dedication to Christian love and service to both God and neighbor.

To Its Faculty and Staff

(1) a campus atmosphere of responsible academic freedom dedicated to the constant search for truth.
(2) an academic community dedicated to openness and acceptance of its pluralistic composition, including personnel policies and practices that are recognized without regard to race, creed, sex, color, physical handicap, or national origin.
(3) a constant reminder of the power of Christian example.

To Its Alumni, Benefactors, and the Parents of Its Students

(1) faithful and responsible stewardship of all funds and gifts entrusted to the College.
(2) continuance of meaningful traditions, particularly those unique to a church-related institution, while at the same time encouraging the exploration and implementation of new value-centered activities especially of the type that have strong Christian relationship.
(3) continuing appreciation for the rich heritage of Union College as an independent, non-sectarian, church-related institution in the Christian tradition.

To The United Methodist Church

(1) acceptance of Jesus Christ as God's revelation of Himself, and of the Holy Spirit as God's continuing presence in life.
(2) acceptance of the moral standards which have evolved in the Judeo-Christian tradition as our ideals for living, working, and witnessing in an academic community, and as the standards for our teachings and personal example.
(3) sensitivity to and a conscientious effort directed toward the satisfaction of the spiritual needs and concerns of the college's students, faculty, and staff.
(4) meaningful responsiveness to and support for The United Methodist Church.

To Barbourville, Knox County, and the Appalachian Area

(1) continuing appreciation that Union College is an integral, social, educational, and spiritual part of the Barbourville and Knox County communities, and of Appalachia.
(2) dedication of the college's resources in teaching, research, and service to the enrichment of the communities of which Union College is a vital part.
(3) a commitment of the personal resources represented by the college's students, staff, and faculty to local churches of the immediate and larger community.

UNDERGRADUATE CALENDAR 1983-84

Summer, 1983 - First Session

May 26, Thursday	****Last day to finalize advance registration for Summer I.**
May 30, Monday	Dormitories open at noon.
	First meal at 5:00 p.m.
May 31, Tuesday	Counseling and Registration, 8:00 a.m.
	Classes begin on abbreviated schedule.
	(Late fee after this date.)
June 2, Thursday	Last day to register for First Session.
June 15, Wednesday	Last day to elect credit/fail option.
	Last day to drop a course.
June 27, Monday	****Last day to finalize advance registration for Summer II.**
July 1, Friday	Final Examinations for First Session.

Summer, 1983 - Second Session

July 1, Friday	Counseling and Registration, 2:30 p.m.
	(Late fee after this date.)
July 4, Monday	Holiday; no classes.
July 5, Tuesday	Classes begin on regular schedule.
July 6, Wednesday	Last day to register for Second Session.
July 20, Wednesday	Last day to elect credit/fail option.
	Last day to drop a course.
August 5, Friday	Final Examinations for Second Session.
August 6, Saturday	Commencement, 10:30 a.m.
	Last meal at noon.
	Dormitories close at 4:00 p.m.

Fall Semester, 1983

August 16, Tuesday	****Last day to finalize advance registration for Fall Semester.**
August 18, Thursday	Administrative Meetings.
August 19, Friday	All-Faculty, Pre-Registration Conference: 9:00 a.m.
	Meeting for new faculty members: 2:30 p.m.
	Dormitories open at 1:00 p.m.
	First meal at 5:00 p.m.
August 20, Saturday	Advising Workshop No. 1: 9:30 a.m. - 12:00 noon.
	Advising Workshop No. 2: 1:30-4:00 p.m.
	Dormitory registration for new students, 9:00 a.m. - 12:00 noon.
	Parents' Orientation, 1:00 p.m.
	Reception, 4:00 p.m.
August 21, Sunday	Student Orientation, 8:30 a.m. - 3:30 p.m.
	Dormitory registration for returning students, 1:00 - 3:00 p.m.
August 22, Monday	Student Orientation (continued)
	Placement Tests, 8:30 a.m. - 12:00 noon.
	Academic Advising.
	Registration for Sophomores, Juniors, and Seniors, 8:00 a.m. - 12:00 noon.
August 23, Tuesday	Student Orientation (continued).
	Academic Advising.
	Registration for Freshmen, 1:00 p.m. - 4:30 p.m.
	(Late fee after this date.)
August 24, Wednesday	Classes begin. (MWF week schedule).
August 24-26	Constitutes the first week for refund purpose.
September 2, Friday	Last day to register for Fall Semester.
	Last day to apply for May graduation.
	Last day for schedule changes.
September 30, Friday	Presidential Inauguration.

October 3-8	Daniel Boone Festival. (Classes meet regularly.)
October 8, Saturday	Parents' Weekend.
October 15, Saturday	Mid-semester vacation begins. Last meal at noon. Dormitories close at 4:00 p m.
October 23, Sunday	Dormitories re-open at noon. First meal at 5:00 p.m.
October 24, Monday	Classes resume. (MWF week schedule.)
October 24-28	Fall counseling sessions scheduled with advisors (classes meet regularly).
November 11, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W".
November 24-26	Thanksgiving vacation. (No classes).
November 27, Sunday	Dormitories re-open at 1:00 p.m. First meal at 5:00 p.m.
November 28, Monday	Classes resume. (TTF week schedule.)
November 28-December 2	Advising and Advance Registration for Spring Semester and May Interim.
December 13, Tuesday	****Last day to finalize advance registration for Spring Semester.**
December 14-17	Final Examinations.
December 17, Saturday	Last meal at noon. Dormitories close at 4:00 p.m.

Spring Semester, 1984

January 8, Sunday	Dormitories open at noon. First meal at 5:00 p.m.
January 9, Monday	Registration. (Late fee after this date.) Counseling and Orientation for new students.
January 10, Tuesday	Classes begin. (MWF week schedule.)
January 20, Friday	Last day to make any schedule changes. Last day to register for Spring Semester. Last day to apply for August graduation.
March 3, Saturday	Spring Vacation begins. Last meal at noon. Dormitories close at 4:00 p m.
March 11, Sunday	Dormitories re-open at noon. First meal at 5:00 p.m.
March 12, Monday	Classes resume. (MWF week schedule.)
March 19-23	Spring counseling sessions scheduled with advisors. (Classes meet regularly.)
March 23, Friday	Last day to elect credit/fail option. Last day to drop a course.
April 2-13	Advising and Advance Registration for May Interim, Summer Sessions, and Fall Semester.
April 19, Thursday	Honors Day Convocation, 10:30 a.m.
May 1, Tuesday	****Last day to finalize advance registration for May Interim.**
May 2-4	Final Examinations.
May 6, Sunday	Commencement 2:30 p.m.

May Interim, 1984

May 7, Monday	Registration. Classes begin. (Late fee after this date.)
May 8, Tuesday	Last day to register for May Interim.
May 16, Wednesday	Last day to elect credit/fail option. Last day to drop a course.
May 25, Friday	Final Examinations.

**Students who register during advance registration and do not make final financial arrangements by date indicated will have to repeat registration during the regular registration period.

ADMINISTRATION

JACK C. PHILLIPS, *President of the College* —A.B., Birmingham Southern College; M.Div., Vanderbilt University; LL.D., Union College.

EDWARD H. BLACK, *Vice President for Administration; Affirmative Action Officer*— B.A., M.A. in Education, Union College.

Academic Affairs

DWIGHT C. STEWART, *Vice President for Academic Affairs*—B.A., Culver-Stockton College; M.Div., Drake University; A.M., Harvard University; Ph.D., Northwestern University.

H. WARREN ROBBINS, *Dean of Graduate Academic Affairs*—B.S., Eastern Kentucky University; M.A., George Peabody College; Indiana University; University of Kentucky; Ed.D., University of Tennessee.

E. EDWIN LeMASTER, *Registrar*—B.A., Asbury College; B.D., Asbury Theological Seminary; M.A., Butler University.

JANET TARRY, *Director of Special Programs*—B.A., University of Louisville; M.A., Murray State University.

DEBORAH CORNELIUS, Assistant Director of Upward Bound Program—B.S., Cumberland College; M.A. in Education, Union College.

JANE ROBBINS, *Upward Bound Counselor* —B.S., Union College.

Student Affairs

FRANCES PATRIDGE, *Vice President for Student Affairs*—B.S., University of Arkansas; M.A., George Peabody College; University of Southern California; Indiana University; D.Hum., Union College.

DONALD McKINNEY, *Dean of Students and Director of the Student Center*—B.S., Eastern Kentucky University; M.Div., Lexington Theological Seminary.

DANIEL CRABTREE, *Director of Admissions* —B.A., University of Kentucky; M.A. in Education, Union College.

LaDONNA R. CAREY, *Director of Financial Aid*—A.A., Evanston Collegiate Institute; B.A., Baker University.

DEBRA SMITH, *Financial Aid Counselor*— B.S., Union College.

FREDA NEW, *Administrative Assistant to the Dean of Students*—Union College.

PHYLLIS SEXTON, *Clerk, Bookstore*—B.S., M.A. in Education, Union College.

Church Relations and Campus Ministry

QUENTIN E. SCHOLTZ, III, *Assistant to the President for Church Relations and Campus Minister*—B.A., M.Sc., University of Kentucky; M.Div., Duke Divinity School; D.Min., Lexington Theological Seminary.

College Relations and Development

MILTON H. TOWNSEND, *Vice President for College Relations and Development*—B.S., Union College; M.A., University of Kentucky.

DWIGHT M. HENDRIX, *Director of Alumni Affairs*—B.A., Union College; M.A., University of Kentucky.

MARY WALKER, *Administrative Assistant to the Vice President for College Relations and Development*—Union College.

Business Affairs

CHERYL BROWN, *Business Manager and Treasurer*—B.A., M.A. in Education, Union College.

MYRLYN LAWSON, *Assistant Treasurer and Bookkeeper*—B.A., Union College.

RICKIE ALLEN, *Director of Purchasing*— B.S., Union College.

DARITA MILLS, *Student Loan Officer*— B.A., Union College.

Library and Learning Resources

JAMES B. McFERRIN, *Head Librarian (Associate Professor)* - B.A., Erskine College; B.S. in Library Science, University of Illinois; Columbia University; University of Southern California.

VIRGINIA B. SADDLER, *Assistant Librarian (Associate Professor)*—B.A., Cornell College; B.S. in Library Science, M.S., University of Illinois.

CASSIE GALLION, *Secretary, Learning Resource Center.*

Computer Center

GEORGE BLACK, *Programmer-Analyst*—.S., Union College.

OUISE MARTIN, *Computer Operator.*

Physical Plant Management

MARSHALL B. POTTER, *Superintendent of Buildings and Grounds*

EUGENE BRANSTUTTER, *Assistant Superintendent of Buildings and Grounds.*

THE FACULTY

ANNE B. ADAMS, *Reading Specialist (Instructor)* — B.S., Murray State University; M.A. in Education, Union College.

.K. BAJPAI, *Assistant Professor of Mathematics* — B.S., Lucknow University, India; M.S., Lucknow University, India; Ph.D., ndian Institute of Technology, Kanpur-India; M.S., Western Michigan University.

VAN G. BUNCH, *Instructor of Coal Technology* — B.S., M.A., Eastern Kentucky Jniversity.

OBERT D. CAREY, *Professor of Education* –B.S., University of Denver; M.A., Peabody College for Teachers; Ph.D., Stanford Univerity.

LEVIS D. CARTER, *Assistant Professor of Physical Science; Director, Coal Technology Program*—B.A., Union College; M.A., George eabody College, University of Tennessee, niversity of Kentucky; Ohio State Universi-.

ANTARAM CHILUKURI, *Professor of hysics; Chairman, Division of Natural ciences* — B.S., M.S., Ph.D., Andhra Univerity, India; State University of New York at uffalo, Yale University.

. JAMES COX, *Chairman, Division of Social cience, Associate Professor of Social Work* – B.A., Cumberland College; M.S.S.W., Kent chool of Social Work, University of ouisville; A.C.S.W.

AVID A. DAVIS, *Assistant Professor of rama and Speech*—B.A., B.S., Trinity Uniersity; M.A., University of Arizona; Ph.D., outhern Illinois University.

LLEN ENGLE, *Instructor of Business Adinistration; Acting Head, Department of usiness* — B.B.A., M.B.A., Eastern Kenucky University.

IANE RUTH FERRIS, *Associate Professor f English, Chairperson, Division of umanities* — B.A., University of Minnesota; .A., Ph.D., University of Washington.

AN M. FINKEL, *Associate Professor of nglish; Head, Department of Languages* — .B., Wittenberg University; M.A., Ph.D., Iniana University.

AREN L. FISHBAUGH, *Instructor of Health nd Physical Education; Coach, Women's Basketball and Softball* — B.A., Otterbein College; M.S., Eastern Kentucky University.

ALLAN E. GREEN, *Associate Professor of Music; Head, Department of Fine Arts* — B.M., Western Michigan University; M.M., Indiana University; Doctoral Candidate, Indiana University; Pupil of Julius Stulberg, David Dawson, and Otto Wimmler in Strings; Wolfgang Vacano in Conducting.

JOE C. HACKER, *Assistant Professor of Business*—B.S., Union College; M.A., Eastern Kentucky University; University of Georgia; University of Tennessee.

PAULA HAMMONS, *Assistant Professor of Office Administration* — B.S., Cumberland College; M.A. in Education, Union College.

LARRY INKSTER, *Assistant Professor of Health and Physical Education; Assistant Director of Athletics; Head Coach for Baseball and Soccer*—B.S., M.A. in Ed., Union College.

NAZIR A. KHATRI, *Assistant Professor of Chemistry* — B.Sc., M.Sc., University of Karachi; Ph.D., University of Nebraska.

JEAN LETCH, *Associate Professor of Education* — B.A., M.A., Ed.S., University of Northern Iowa; Ph.D., University of Iowa.

JACK LUZKOW, *Assistant Professor of History* — B.A., Wayne State University; M.A., Ph.D., St. Louis University.

MARY ALICE LAY, *Assistant Professor of Education*—B.S., M.S., University of Kentucky; University of North Dakota; Indiana State University.

RICHARD LOCKETT, *Instructor in Political Science; Director of Experiential Education* — A.B., Centre College; Doctoral Candidate, University of Kentucky.

W. GORDON MARIGOLD, *Professor of Languages* — B.A., University of Toronto; M.A., Ohio State University; University of Munich; Ph.D., University of Toronto.

ROBERT D. MATTHEWS, *Frances Landrum Memorial Professor of Religion; Head of Department of Philosophy and Religion* — B.A., Wheaton College; S.T.B., Ph.D., Boston University; Clark University; Archaeological excavation, Gezer, Israel.

DERIL K. MAYS, *Professor of Psychology* — B.S., Union College; M.A., University of Kentucky; Ed.D., University of Tennessee.

PAUL S. MOORE, *Professor of Health and Physical Education; Chairperson, Division of Applied Science; Head of Department of Health and Physical Education; Director of Athletics* — A.B., Union College; M.S., University of Tennessee; Indiana University; University of Oregon; Ed.D., University of Alabama.

FRANCIS E. NUSSBAUM, JR., *Professor of Biology* — B.S., Ohio University; Ph.D., Michigan State University.

FRANCES PATRIDGE, *Associate Professor of Health and Physical Education* — B.S., University of Arkansas; M.A., George Peabody College; University of Southern California; Indiana University; D.Hum., Union College.

BILL PETERSON, *Instructor of Health and Physical Education; Head Basketball Coach* —A.A., St. Petersburg Junior College; B.A., Eckerd College; M.S., Louisiana Tech University.

H. WARREN ROBBINS, *Professor of Education* — B.S., Eastern Kentucky University; M.A., George Peabody College; Indiana University; University of Kentucky; Ed.D., University of Tennessee.

ROY SILVER, *Assistant Professor of Sociology; Coordinator, Appalachian Semester* — B.A., University of Toledo; M.A., Queens College, CUNY; Ph.D., University of Toledo.

DWIGHT C. STEWART, *Professor of Philosophy* — B.A., Culver-Stockton College; M.Div., Drake University; A.M., Harvard University; Ph.D., Northwestern University.

BETTY S. STROUD, *Associate Professor of Music* — B.S., M.A., Louisiana State University; Ed.D., University of Illinois.

ROBERT W. SWANSON, *Assistant Professor of Environmental Studies* — B.S., Purdue University; M.S.Ed., Indiana University Northwest; Ed.D., Indiana University.

JOHN C. TAYLOR, *Assistant Professor of History* — B.A., Juniata College; J.D., Duke University; M.A., Ph.D., Pennsylvania State University.

JOE E. TARRY, III, *Professor of Music; Head, Department of Music*—B.M. Ed., Murray State University; B. Church Music, Southern Baptist Theological Seminary; M.M., George Peabody College for Teachers; Ph.D. in Music Education, Florida State University.

SHEILA K. TUCKER, *Instructor of Business Administration* — B.B.A., M.B.A., Eastern Kentucky University.

ANDELYS WOOD, *Associate Professor of English* — A.B., Middlebury College; Ph.D., Indiana University.

LESTER G. WOODY, *Professor of English* — B.A., University of Virginia; M.A., University of Richmond; Ph.D., University of North Carolina.

Adjunct Faculty

JOHN H. BOYD, *Professor of Education* — A.B., Western Kentucky State College; M.A., Ed.D., University of Kentucky.

JOHN F. ELSWICK, *Lecturer in Business Administration* — B.G.S., University of Nebraska; M.B.A., Southern Illinois University.

ARTHUR H. HAFNER, *Professor of Education* — Ph.B., Muhlenberg College; M.A., Lehigh University; Ed.D., Teachers College, Columbus University.

JOHN F. HENDRICKSON, *Lecturer in Radiologic Technology* — Miners Memorial Hospital; Pineville Community Hospital; Eastern Kentucky University; Registered Radiologic Technologist (RT).

RODERICK MESSER, *Lecturer in Business Law* — B.A., J.D., University of Kentucky.

FAZAL M. SIDDIQUI, *Lecturer in Radiologic Technology* — M.D., Osmamia University (India); Fellow, Marquette University Hospitals; Resident, Baroness Erlange Hospital; Member of the American College of Radiology; Fellow of American College of Chest Diseases.

MARSHA STARNES, *Lecturer in Medical Technology* — B.S., Eastern Kentucky University; Registered Medical Technologist (ASCP).

BETTY WILLIAMSON, *Lecturer in Medical Technology* — B.S., Eastern Kentucky University; Registered Medical Technologist (ASCP).

JOHN YATROS, *Associate Professor of Psychology* — B.S., Concord College; M.A., West Virginia University; Ed.D., India.

Faculty Emeriti

ERWIN S. BRADLEY, *Professor Emeritus of History and Political Science* — B.S. in Ed., uniata College; M.A., University of Michi- an; Ph.D., Pennsylvania State University.

RANK A. GILBERT, *Professor Emeritus of Biology* — B.S., University of Massachu- etts; M.A., Ph.D., Harvard University.

RANK E. MERCHANT, *Professor Emeritus f English* — A.B., M.A., Brown University; h.D., University of Denver.

ENA MILLIKEN, *Professor Emeritus of usiness* — A.B., Western Kentucky Univer- ity; M.A., George Peabody CIlege; Indiana niversity; Case Institute of Technology.

KATHLEEN MOORE, *Associate Professor Emeritus of Elementary Education* — A.B., Mississippi State College for Women; M.A., Teachers College, Columbia University; Ohio State University; University of Southern California.

MARY PETTUS, *Associate Professor Emeritus of Mathematics* — A.B., Georgetown College; M.A., University of Chicago.

CHARLES W. SIMMS, *Professor Emeritus of Education* — B.S., Millsaps College; M.A., Ph.D., George Peabody College.

BOARD OF TRUSTEES

FFICERS OF THE BOARD

r. Douglas L. Blair
President
Ir. Erland P. Stevens, Jr.
Vice President
he Rev. Dr. R. Walton Gardner
Secretary

X OFFICIO MEMBERS

r. Jack C. Phillips
Barbourville, Ky.
ishop Paul A. Duffey
Louisville, Ky.

LUMNI MEMBERS

ev. Charles Chakour
Naperville, IL
Ir. Jerry Carey
Barbourville, Ky.
Irs. Sampson Knuckles
Barbourville, Ky.

T LARGE MEMBERS

Ir. R.L. Brown, Jr.
Corbin, Ky.
Ir. Samuel E. Davies
Barbourville, Ky.
r. Ronald N. Collier
Louisville, Ky.
r. Walter J. Heddesheimer
Cleveland, Oh.
r. Julian W. Habercam
Charleston, S.C.
Irs. James R. Perry
West Liberty, Ky.
r. Homer Rice
Atlanta, Ga.
r. J. Stanley Faulkner, M.D.
Fort Thomas, Ky.

Dr. Thomas A. Jenkins
Houston, Tex.
Dr. Fred R. Stevens
Winter Haven, Fl.
Dr. Alan B. Wagner
Lexington, Ky.
Rev. Dr. C. Noel White
Lexington, Ky.

KENTUCKY CONFERENCE MEMBERS

Rev. Dr. Robert L. Anderson
Barbourville, Ky.
Mr. John C. Anggelis
Lexington, Ky.
Dr. Douglas L. Blair
Barbourville, Ky.
Rev. Dr. Donald W. Durham
Lexington, Ky.
Rev. Dr. R. Walton Gardner
Somerset, Ky.
Rev. Dr. Raymond W. Gibson, Jr.
Versailles, Ky.
Dr. Edward L. Cawood
Harlan, Ky.
Mr. Eugene C. Cawood
Harlan, Ky.
Dr. Elbert W. Ockerman
Lexington, Ky.
Dr. Cecil H. Wilson
Barbourville, Ky.
Dr. Erland P. Stevens
Ashland, Ky.
Dr. L.D. Sweazy
Versailles, Ky.

LOUISVILLE CONFERENCE MEMBERS

Rev. Dr. John C. Brinson
Princeton, Ky.
Mr. Richard K. Fenley
Louisville, Ky.

Mr. Smith D. Broadbent, Jr.
Cadiz, Ky.
Dr. Charles R. Brown
Henderson, Ky.
Rev. Wendell E. Hurt
Louisville, Ky.
Rev. Dr. Billy J. Cox
Valley Station, Ky.
Dr. Thomas A. Eastes
Louisville, Ky.
Rev. Dr. Paul Shepherd
Louisville, Ky.
Dr. James E. Parker
Louisville, Ky.
Rev. Dr. Donald B. Davis
Henderson, Ky.
Dr. Samuel G. Swope
Louisville, Ky.

ASSOCIATE TRUSTEES

Reverend W. Arvil Allen
Henderson, Ky.
Mr. William H. Ball, Jr.
Greensboro, NC
Mr. Ronnie Callihan
Flat Lick, KY
Rev. Virgil J. Fryman
Corbin, Ky.
Rev. Dr. Horace H. Greene
Lexington, Ky.
Reverend Harold Henson
Corbin, Ky.
Dr. Patrick Jasper
Somerset, Ky.
Rev. L. Carman King
Hopkinsville, Ky.
Mr. Roy L. Pulliam, Jr.
Hazard, Ky.
Dr. John M. Robsion, Jr.
Ft. Lauderdale, Fl.
Mrs. Harland Sanders
Shelbyville, Ky.
Mr. Robert E. Viall
Barbourville, Ky.
Dr. Benny J. Wilson
Barbourville, Ky.

EMERITI TRUSTEES

Dr. Leo A. Geiss
St. Charles, IL

NDEX

pplication for Admissions 12
cademic Amnesty 29
cademic Scholarships 18
ccounting, Courses in 37
ccounting, Associate of Applied Science Degree in 37
dministration and Staff 84
dmission Requirements—Undergraduate 12
dmission Procedure 12
dmission of Foreign Students 12
dvanced Placement 6, 13
dvanced Placement for Veterans 6
ransfer and Advanced Standing 13
ppalachian Studies 7, 74
ppalachian Semester 7, 74
rt, Courses in 49
ssistantships 18
ssociate Degrees 36
thletics 77
ttendance Regulations 25
utomobiles 78
wards 23

ehavioral Sciences 70
iology, Courses in 60
oard of Trustees 87
uildings 76
usiness Administration, Courses in 38
usiness and Economics, Department of 34
usiness Education, Courses in 38

alendar for the College Year 82
ampus Housing 78
areer Ladder Concept 8
areer Oriented Programs 2
areer Planning, Academic Advising and Placement 7
hemistry, Courses in 61
hristian Education 57
lass Attendance 25
oal Mining Technology 67
ollege for High School Students 6
ollege-Level Examination Program (CLEP) 7
ombined Degrees 28
omputer Science, Associate of Applied Science Degree in 39
omputer Science, Courses in 39
orrespondence Credit 27
ourse Numbering System 33
redit/Fail System 25
redit for Prior Learning 9
urricula:
Applied Sciences, Division of 34
Humanities, Division of 49
Natural Sciences, Division of 59
Social Sciences, Division of 70

evelopmental Studies Program 9

Degrees:
Associate of Arts 32
Associate of Applied Science 34
Associate of Science 32
Bachelor of Arts 32
Bachelor of Science 32
With Distinction 29
Diploma in Office Administration 37
Drama and Speech, Courses in 49

Economics, Courses in 39
Education, Courses in 45
Education, Associate of Applied Science 44
Elementary Education Curriculum 41
Emeritus Faculty 87
Employment 16
Employee Scholarships 17
Endowments 22
English, Courses in 54
Engineering, Combined Degree in 59
Entrance Tests 12
Environmental Studies 7, 62
Examinations and Reports of Marks 25
Expenses 13
Experiential Education 8
Extension Program 27
Extension and Correspondence 27

Faculty 85
Fees 13
Financial Assistance 15
French, Courses in 56

Geography, Courses in 74
GED Acceptance 12
General Science, Courses in 63
German, Courses in 56
Graduate Program in Education 8
Graduation Requirements 27
Grants 16

Health Certificate 12
Health, Courses in 46
Health Sciences, Combined Degrees 60
Health Service 78
History, Courses in 72
Historical Sketch of Union College 2
Honor Students 26
Housing 78

Individualized Major 8
Interdepartmental Numbers 33
Intramurals 77

Junior College Scholarships 18

Kentucky Tuition Grant 16
Kentucky Internship Program 8
KHEAA Guaranteed Student Loan Program 16

Learning Resource Center 79
Library Services 79

Loans 16
Loans—Grants 17
Location of Union College 76

May Interim Term 6, 14
Majors & Degrees 32
Map of College (inside back cover)
Marking System 26
Mathematics, Courses in 63
Medical Secretarial Administration, Associate of Applied Science Degree in 36
Medical Technology Degree 59
Military Service Credit 17
Mission Statement 80
Music-Business Major 51
Music, Courses in 52

National Direct Student Loan Program 16

Oak Ridge Programs 6
Office Administration, Associate of Applied Science Degree in 37
Office Administration, Diploma in 37
Office Administration, Courses in 39

Pell Grants 16
Personal Interview 12
Philosophy, Courses in 58
Physical Education, Courses in 47
Physical Examination 12
Physical Therapist Assistant Program 59
Physics, Courses in 64
Planned Curriculum 29
Political Science, Courses in 74
Pre-Professional Programs:
Pre-dentistry 59
Pre-engineering 59
Pre-law 72
Pre-medical Technology 59
Pre-medicine 59
Pre-ministerial Training 59
Pre-optometry 59
Pre-pharmacy 59
Pre-physical Therapy 59
Pre-veterinary Medicine 59
Probation 26
Proficiency Examinations 26

Project AHEAD .....
Psychology, Courses in .....
Publications .....

Quality Point Standing .....

Radiologic Technology, Associate of Science Degree in .....
Recommendations .....
Refund Information .....
Religion, Courses in .....
Religious Life .....
Room and Board .....

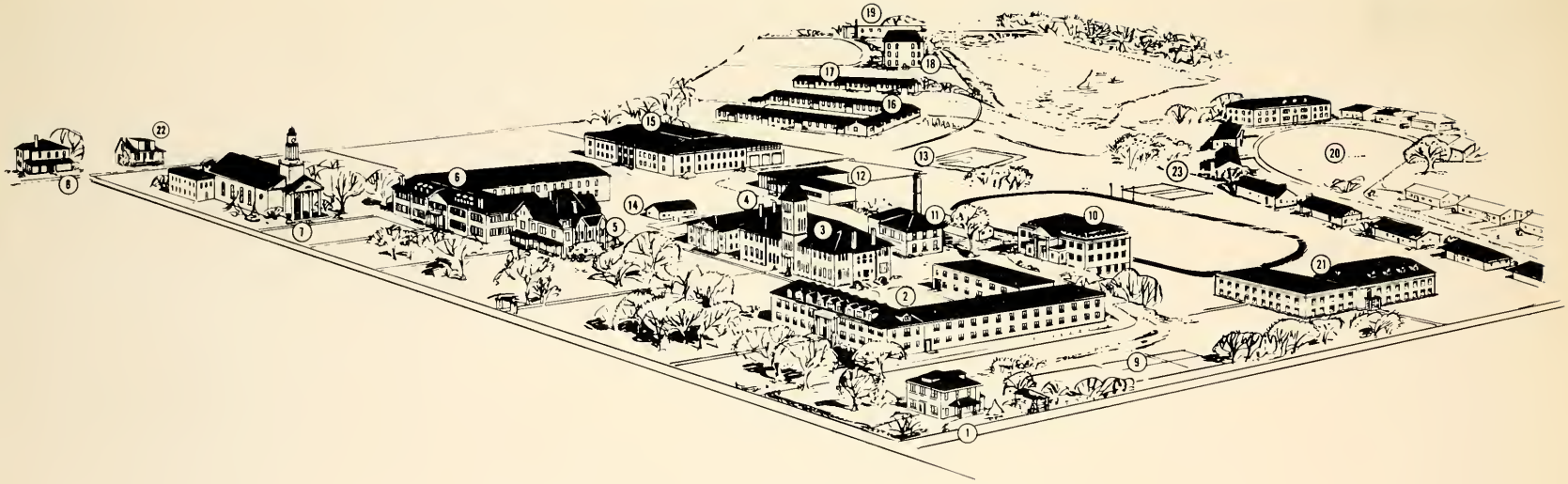
Scholarships .....
Science Education Major .....
Secondary Education Curriculum .....
Secondary School Transcript .....
Social Life .....
Sociology, Courses in .....
Special Notations .....
Special Programs .....
Speech and Drama, Courses in .....
State Student Tuition Grant .....
Statement of Purpose .....
Statement of Values .....
Student Aid .....
Student Conduct .....
Student Load .....
Student Organizations .....
Summer Session Expenses .....
Supplemental Educational Opportunity Grant .....
Suspension .....
Student Teaching .....

Teacher Education, Requirements for Admission .....
Teacher Education Objectives .....
Terms of Payment .....
Transfer and Advanced Standing .....

Unique Majors and Minors .....
Undecided Majors .....

Vocational School Graduates .....
Vocational Education, AAS Degree .....

Work Grant .....
Work-Study Program .....



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Centennial Hall
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Tye House
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts

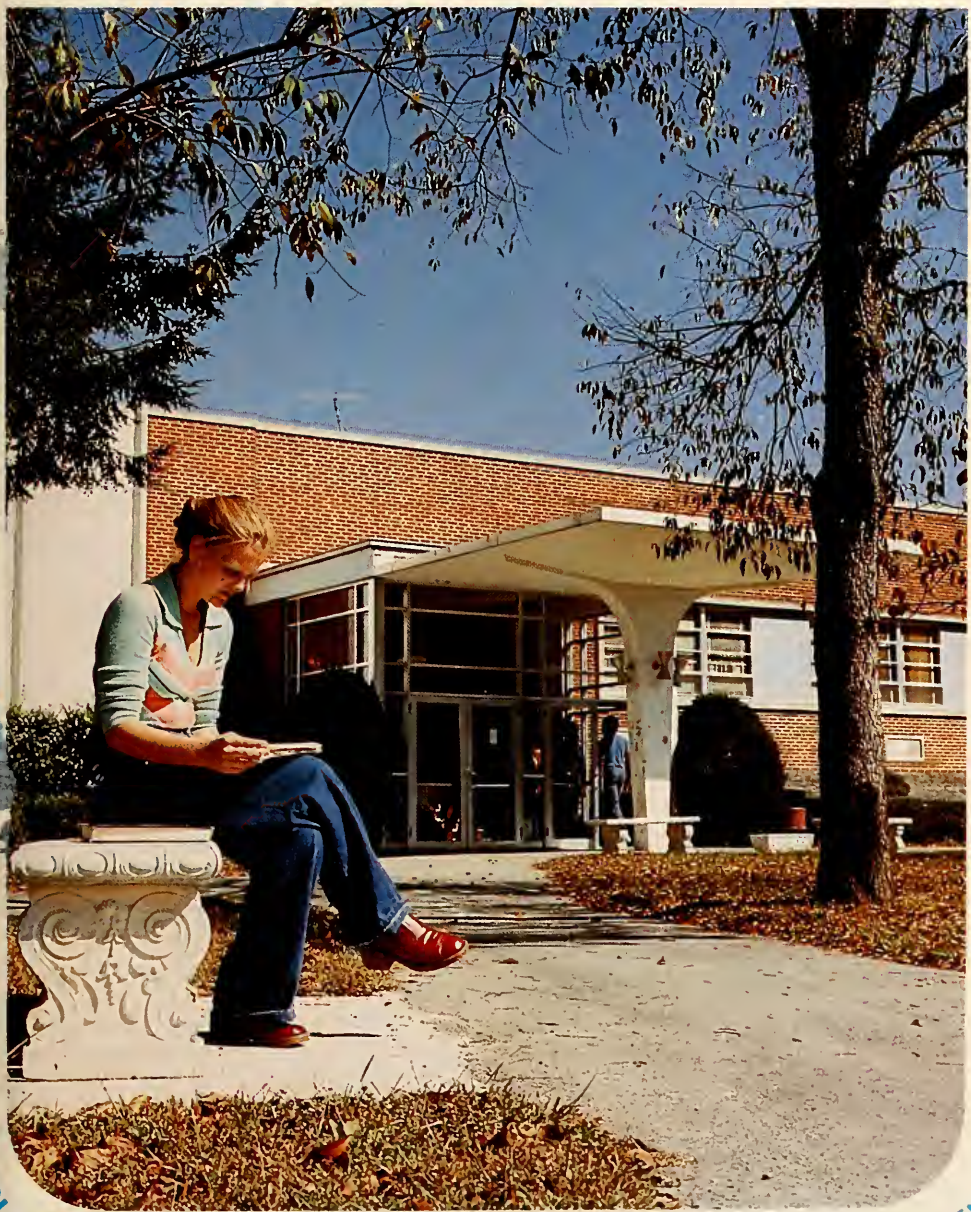
UNION
COLLEGE

BARBOURVILLE
KENTUCKY 40906
606/546-4151

S.B. Newman Printing-Knoxvi

UNION

1983-85 Graduate Catalog



OLLEGE IN KENTUCKY • UNION COLLEGE • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY

DIRECTORY FOR CORRESPONDENCE

Academic Work ..... *Dean of Graduate Academic Affairs*
Admission to the Graduate Studies Program ..... *Dean of Graduate Academic Affairs*
Alumni Affairs ..... *Director of Alumni Affairs*
Charges and Payment of Bills ..... *Business Manager and Treasurer*
Personal Welfare, Health of Students, Housing ..... *Dean of Students*
Scholarships, Workships and Loans ..... *Director of Student Financial Aid*
Transcripts—Academic Records—Veteran Affairs ..... *Registrar*

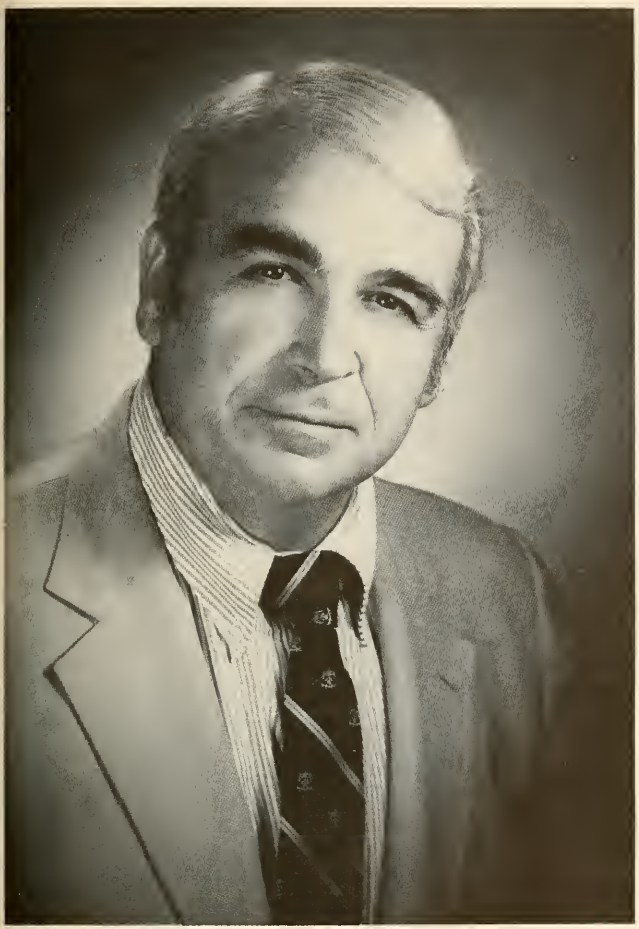
TELEPHONE COMMUNICATION

A campus-wide network of telephones enables the caller to reach any administrative or staff office by dialing the central switchboard.

Central Switchboard ..... (606) 546-4151
Pfeiffer Hall (Women's Residence) ..... (606) 546-3421
Stevenson Hall (Men's Residence) ..... (606) 546-3659

Union College is accredited by the Southern Association of Colleges and Schools, the Kentucky State Department of Education, and approved by the University Senate of the United Methodist Church.

It is the policy of Union College not to discriminate on the basis of sex, race, color, handicap, or national and ethnic origin in the admission of students or in its administration of educational programs, scholarships, loan programs, athletic participation, or other school-administered programs. Inquiries should be directed to Edward N. Black, Affirmative Action Coordinator.



DR. JACK C. PHILLIPS

Welcome To Union College

We welcome and invite you to examine the Graduate Studies Program of Union College. Founded in 1879 by Barbourville citizens and purchased in 1886 by the Methodist Episcopal Church, Union has as its chief mission, service to the Appalachian area of Southeastern Kentucky, Eastern Tennessee, and Southwestern Virginia.

With an enrollment of nearly 900 students, including both graduate and undergraduate persons, Union College is committed to excellence in the academic program. The College offers the Bachelor of Arts, the Bachelor of Science, the Master of Arts in Education Degrees, and Rank I Program, along with Associate of Arts Degrees and several one-and two-year programs.

Located on the historic Wilderness Road, Union is the oldest College in this tri-state area. There are now 7,789 graduates with 2,928 having the Master of Arts in Education Degree.

I am glad that you are interested in our graduate program and hope that you will like what you see in these pages. In fact, we hope you like it so much you will join us for many happy and profitable experiences.

Sincerely,

Jack C. Phillips

Jack C. Phillips
President

A College With A Mission

Statement of Purpose

Union College is an independent institution of higher education affiliated with the United Methodist Church. It is dedicated to maintaining an academic environment that stimulates intellectual curiosity and scholastic competence, encourages an understanding of and commitment to the Christian faith, and undergirds the development of the whole person, so that students will develop the human resources needed to live creatively and wholesomely in a changing world.

Students are admitted to Union College without regard to race, creed, age, sex, or physically handicapping condition. Although eastern Kentucky and the general mid-Appalachian region constitute the primary service area of the college, it is intended that a balance will be maintained by enrolling applicants from across the nation and around the world.

Union College is committed to providing a faculty characterized by sound scholarship, stimulating teaching, exemplary character, and a deep concern for the needs of students. Classes are small, many teaching and learning options are provided, and opportunities for both professional and informal counseling and guidance are abundant.

Union College desires to provide a broad academic program to meet a wide variety of student and social needs and interests. The basic undergraduate liberal arts program of the college provides opportunities for preparation in the professions as well as general education in the humanities, arts, social studies, and sciences. Union College also has curricula at the certificate, associate degree, and graduate levels. These latter curricula are closely coordinated with regional manpower needs. Credit and non-credit continuing education offerings are available for persons seeking skills and/or desiring personal enrichment. Classes in all categories are offered on demand in various communities within the primary service area of the college in order to provide maximum convenience and minimum cost for students.

Union College affirms a special concern for improving the quality of life in Appalachia. The academic program provides undergraduate and graduate curricula in education that contain elements designed to address the unique needs of the public schools in the region. Appalachian regional studies make available to all interested students a basis for understanding the history and distinctive features of the region. The college's community service programs provide both on-campus and off-campus instruction in a variety of subjects for the educationally disadvantaged at the pre-college level as well as non-credit continuing education classes for the community at large.

In order to further the development of a free society of responsible individuals, Union College is committed to student involvement in institutional governance as an aid to the development of responsibility and leadership capabilities. Through student outreach programs a philosophy of life is encouraged that has a significant place for using one's time, talents, and resources in voluntary service activities.

A History of Service

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as Centennial Hall.

The college was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson, President of Augusta Collegiate Institute at Augusta, Kentucky, was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed of Louisville led to the construction of Speed Hall, Stevenson Hall, and what is now Centennial Hall.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a bona fide college again in the Presidency of Ezra T. Franklin who inaugurated a program of development during which the Memorial Gymnasium, now the Dramatic Art Center, and a home for the President were built, and the invested funds of the college were materially increased. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. His ambition was to see Union College fully accredited. In 1931 it was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. During this administration, land adjacent to the campus was purchased, a maintenance building was erected, and the financial structure was reorganized.

In Conway Boatman's twenty-one years of leadership, the college achieved substantial progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959 and served in this capacity until 1982. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center was completed in 1973.

In response to the needs of graduate students, the college began to offer graduate classes in other communities in 1973. This program has since expanded to serve in-service teachers with extension courses in twelve or more communities throughout the region.

In 1975, Union College began offering the Specialist in Education degree (Ed.S) and Kentucky Rank I certification with the administrator's certificate. Continuing for seven years, the Ed.S. program failed to generate the interest and needs of students and was therefore phased out. However, the Rank I program has continued to grow and draw students.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career oriented curricula at the Associate Degree level. As the college moves into its second century it is expanding and enriching its service to Appalachia while at the same time fulfilling the needs of the many students from other states and other countries who come to Union College for an education.

In 1979 Union celebrated its centennial year with a year-long program of activities by students, faculty, alumni, Trustees, and friends. A centennial campaign provided funds to renovate the Classroom Building which was then re-named Centennial Hall.

In January of 1983, Jack B. Phillips became the 10th president of Union College with a promising future on the horizon for Union College.

A Statement of Values

Union College is dedicated to preparing students for living informed, socially useful, personally fulfilling, and spiritually vital lives. This commitment involves using knowledge within a context of Christian values. Although it is recognized that as an educational institution Union College has an obligation to help students understand other value systems and their effects when translated into specific areas of human activity, as a Union Methodist Church-related college Union affirms an institutional stance based on Christian values such as have evolved in the Judeo-Christian tradition and are contained in the Old and New Testaments. Our intent is both to confess and to practice the Christian faith in all our endeavors.

IMPLICIT IN THIS STATEMENT OF VALUES IS THE REQUIREMENT THAT UNION COLLEGE COMMIT ITSELF TO THE VALUES ENUNCIATED BY ASSURING TO THE MAXIMUM EXTENT POSSIBLE:

To Its Students

(1) the fullest of opportunities to receive a quality liberal arts education.
(2) strong attention to, and genuine concern for, each individual in the college community, including emphasis upon the unique value of each person.
(3) a continuing concern that they learn to appreciate and accept life styles that reflect integrity, honesty, compassion, and social responsibility.
(4) a commitment to provide the experiences necessary to acquire a meaningful understanding of and dedication to Christian love and service to both God and neighbor.

To Its Faculty and Staff

(1) a campus atmosphere of responsible academic freedom dedicated to the constant search for truth.
(2) an academic community dedicated to openness and acceptance of its pluralistic composition, including personnel policies and practices that are recognized without regard to race, creed, sex, color, physical handicap, or national origin.
(3) a constant reminder of the power of Christian example.

To Its Alumni, Benefactors, and the Parents of Its Students

(1) faithful and responsible stewardship of all funds and gifts entrusted to the College.
(2) continuance of meaningful traditions, particularly those unique to a church-related institution, while at the same time encouraging the exploration and implementation of new value-centered activities especially of the type that have strong Christian relationship.
(3) continuing appreciation for the rich heritage of Union College as an independent, non-sectarian, church-related institution in the Christian tradition.

To The United Methodist Church

(1) acceptance of Jesus Christ as God's revelation of Himself, and of the Holy Spirit as God's continuing presence in life.
(2) acceptance of the moral standards which have evolved in the Judeo-Christian tradition as our ideals for living, working, and witnessing in an academic community, and as the standards for our teachings and personal example.
(3) sensitivity to and a conscientious effort directed toward the satisfaction of the spiritual needs and concerns of the college's students, faculty, and staff.
(4) meaningful responsiveness to and support for The United Methodist Church.

To Barbourville, Knox County, and the Appalachian Area

(1) continuing appreciation that Union College is an integral, social, educational, and spiritual part of the Barbourville and Knox County communities, and of Appalachia.
(2) dedication of the college's resources in teaching, research, and service to the enrichment of the communities of which Union College is a vital part.
(3) a commitment of the personal resources represented by the college's students, staff, and faculty to local churches of the immediate and larger community.

Purpose of Graduate Studies Program

The Union College graduate studies program is designed primarily for in-service teachers in the mid-Appalachian region of Kentucky, Tennessee, and Virginia, although students are attracted from states ranging from New York to Florida and a few foreign countries.

Major factors which draw these students include a flexible program which fits the work schedule of teachers, a dedicated and well trained faculty, a variety of areas of emphasis designed to improve the quality of education, and the individual attention available to each graduate student. A limited number of persons who do not have teaching or administrative certification enroll in the graduate studies program to broaden their background and their knowledge.

Rank II and Rank I programs which meet Kentucky certification standards for professional advancement are available as well as the traditional degree of Master of Arts in Education.

Union's graduates hold responsible positions in teaching and school administration throughout the Appalachian region.

The objectives of the Graduate Studies Program are:

(1) To prepare teachers and school leaders for greater service through extension of those fields of study which result in improved classroom instruction, informed administration and human understanding.

(2) To provide graduate study for those who seek an advanced degree beyond the baccalaureate program.

(3) To encourage the attainment of excellence in scholarship, the acquisition of special skills in the field of education, and to develop a sense of obligation to contribute to the intellectual, cultural and economic growth of the community.

(4) To prepare students to think critically, to express themselves creatively, and to make independent and rational judgments.

In 1979, long range goals were formulated and adopted by the Graduate Council with advice from the Graduate Advisory Council, graduate students, and graduate alumni of Union College. These goals, intended to complement the objectives of the Graduate Studies Program and not to replace them, follow:

1. To extend course offerings in which classroom teachers, administrators, and other school personnel may enroll to enable them to overcome felt deficiencies.
2. To systematically, on an annual basis, evaluate and analyze course objectives and content to determine whether current needs of students are being met.
3. To make a continuous effort to improve **admission** and **exit** criteria for students which would be commensurate with a quality education program.
4. To continuously improve and upgrade library holdings at a rate of four percent a year.
5. To continuously provide and improve means for students to acquire library materials in off-campus classes.
6. To promote seminars on campus for all faculty teaching graduate courses for the purpose of:
   - discussion of current issues and trends in education
   - upgrading instructional delivery systems
   - review and orientation to new materials and equipment
7. To provide a continuous opportunity for faculty development whereby faculty can attend professional meetings, participate in workshops, and prepare and deliver papers for learned societies.
8. To maintain a close working relationship with public school officials in the area in developing courses for the Fifth Year Program to meet the needs of in-service teachers and the school system.

GRADUATE CALENDAR (1983-84)*

FALL SEMESTER - 1983

July 25-29	Advance Registration for Fall Semester - (Registrar's Office) 8:00 - 3:30 p.m.
August 18, Thursday	Administrative Meetings.
August 19, Friday	Final financial arrangement for advance registration must be completed. All-Faculty, Pre-Registration Conference - 9:00 a.m. Dormitories open at 1:00 p.m. First Meal at 5:00 p.m .
August 22, Monday	Registration - 4:00 - 7:00 p m. (Speed Hall) Late Registration fee after this date except where registration is held in off campus classes.
August 24, Wednesday	Classes begin.
August 26, Friday	Last day to submit proposal for independent study.
September 2, Friday	Last day to register for Fall Semester. Last day to apply for May graduation.
September 10, Saturday	Orientation for M.A. Comps - 10:00 a.m. (SC - 210)
September 30, Friday	Presidential Inauguration.
October 3-8	Daniel Boone Festival.
October 17-22	Mid-semester vacation .
October 29, Saturday	National Teacher's Exam - (required of all students who have begun graduate work since September 1, 1979). 8:00 a.m. (P206)
November 11, Friday	Last day to drop a class with a grade of "W". After this date an "F" is assigned to the course if the student is not attending class and has not dropped the course. All SCHEDULE changes must be made in the Registrar's Office.
November 24-26	Thanksgiving Holidays (no classes)
November 28 - Dec. 2	Advising and Advance Registration for Spring Semester.
December 3, Saturday	M.A. Comprehensive Exams - 1:00 - 5:00 p.m. (PE 206) Students must apply in Graduate Office by November 7.
December 14-17	Final Examinations
December 17, Saturday	Semester Ends.

SPRING SEMESTER - 1984

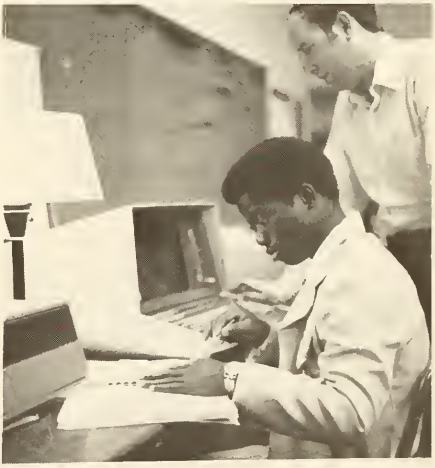
January 6, Friday	Final financial arrangement for advance registration must be completed.
January 7, Saturday	Faculty meeting for adjunct faculty - 2:00 p.m. - (SC 210)
January 8, Sunday	Dormitories open at noon. First meal at 5:00 p.m.
January 9, Monday	Registration - 3:00 p.m. - 7:00 p.m. (Late registration fee after this date.)
January 10, Tuesday	Classes begin.
January 13, Friday	Last day to submit proposal for independent study.
January 20, Friday	Last day to make schedule changes and to register for the spring semester. Last day to apply for August graduation.
January 21, Saturday	Orientation for M.A. Comps - 10:00 a.m. (SC 210)
March 5-11	Spring vacation.
March 23, Friday	Last day to drop a class with a grade of "W". After this date an "F" is assigned to the course if the student is not attending class and has not dropped the course. All schedule changes must be made in the Registrar's office.
March 24, Saturday	National Teacher's Exam (required of all students who have begun graduate work since September 1, 1979). 8:00 a.m. - (P 206)
April 2 - 13	Advising and Advance Registration for May Interim and Summer Sessions.
April 13-14-15	Homecoming.

*Calendar for 1984-85 will be attached to class schedules.

April 14, Saturday	M.A. Comprehensive Exams - 1:00 - 5:00 p.m. (PE 206). Students must apply in graduate office by March 30.
May 2 - 4	Final examinations
May 5, Saturday	Graduate classes end.
May 6, Sunday	Commencement.

MAY INTERIM - 1984

May 1, Tuesday	Final financial arrangements for advance registration for May Interim must be completed.
May 7, Monday	Registration 3:00 - 7:00 p m. (Late fee after this date.)
May 8, Tuesday	Last day to register for May Interim.
May 16, Wednesday	Last day to drop a class with a grade of "W". After this date an "F" is assigned to the course if the student is not attending class and has not dropped the course. All schedule changes must be made in the Registrar's office.
May 25, Friday	Final Exams.



General Information

Location of the College

Union College is located in Barbourville, a residential town of 3,500, on U.S. Highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

Graduate students may enroll for a portion of their work in off campus locations near their home. Normally two classes a semester are offered at each location with a wider variety of courses available on campus in the evenings and on Saturday mornings.

OFF CAMPUS LOCATIONS: Corbin, Cumberland, Elkhorn City, Harlan, London, Manchester, Middlesboro, Monticello, Oneida, and Whitley City.

Learning Resources

The ABIGAIL E. WEEKS MEMORIAL LIBRARY houses a collection of approximately 80,000 volumes. More than 350 periodicals are regularly received, along with indexing services to facilitate their use. It is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the library and students are given instruction in the use of its facilities. The college houses a special Lincoln-Civil War collection containing over 1200 volumes, a curriculum library, and a music library with a collection of 3,500 recordings and musical scores.

By special arrangement periodicals and book collections may be delivered to extension sites to help ensure library resources for off-campus graduate students.

The LEARNING RESOURCE CENTER supplements the printed materials of the Library with a broad range of non-print media, including slides, audiotapes, videotapes, filmstrips and kits. The most recent hardware acquisitions include two small desk-top computer systems which are available for use by students and faculty. In addition to providing educational materials for classes and individualized instruction, the Center offers production services such as graphics, photography, and special media presentations. LRC staff also instruct students and faculty in the use of equipment and materials.

Computing Facilities

Computer instruction and use are available to all Union College graduate students.

Academic computing is supported primarily by three types of microcomputer: Apple IIe, TRS-80 Model III, and TEKTRONIX. A total of twenty such computers are available for classroom instruction, laboratory exercise, and individual use by students and faculty. With such microcomputers becoming more readily available in public and private schools, an increasing variety of opportunities is being offered for teachers to use this Union College equipment to learn to use computers effectively in their teaching.

Administrative computer applications are supported by a Hewlett-Packard minicomputer located in the Data Processing Center on campus. Four offices in Speed Hall have remote terminals through which they enter and retrieve data. Terminals located in the DP Center are used for data entry and program development. In addition, a statistical analysis program is run on the HP system. This package is used by all Educational Research classes as well as individual faculty or student researchers.

Campus Activities

Student activity fees are not required of graduate students. Graduate assistants, graduate students living on campus, or those residing near the campus are encouraged to take part in social and cultural functions of the college. Concerts, dances, special speakers, drama productions, movies and athletic events are available through the purchase of a student activity ticket each semester.

Automobiles

At the time of registration for classes, all students who possess automobiles must complete an automobile registration card. Students who wish to park on campus must pay a $2.00 parking fee and affix a Union College permit. Students must meet minimum insurance requirements as set forth by the Commonwealth of Kentucky.

Housing

Full-time graduate students may elect to live on-campus or obtain their own facilities in the community. Dormitory rooms are available and may be obtained through contact with the Dean of Students. All students living in the dormitories are required to obtain a boarding ticket and eat in the college dining hall.

A limited number of married student housing apartments are available. Applications should be made in advance with the Dean of Students.

ADMISSIONS

Admission to the Graduate Studies Program

All applicants for admission to the Graduate Studies Program must possess a baccalaureate degree from a regionally accredited four year institution. Applicants for the Rank I Program are expected to have earned a Master's Degree or the equivalent at such an institution.

Applications will be filed on the form provided by the college and be accompanied by a check or money order for $15. The application fee is waived for Rank I applicants who have earned the M.A. degree or 5th Year Program at Union College.

Two official transcripts of undergraduate and graduate work taken at other institutions must be filed in the Graduate Office no later than the end of the first term of attendance in a Union College class.

A copy of the teaching certificate held by the applicant noting the areas in which the student is qualified to teach must be filed with the Graduate Office.

A limited number of students without teaching certificates are admitted to the Graduate Program. (However, these students cannot obtain certification unless the required courses for certification are taken). These persons desire to improve their academic background without teaching certification.

Applicants for admission to a program leading to a Fifth Year Certificate (valid in Kentucky) must be teachers who have already completed one teacher education program and who are certified professionals. The admission to the program requires that the applicant (a) hold a baccalaureate degree from a regionally accredited 4 year institution, (b) exhibit an undergraduate grade point average of 2.50 or better, based on a 4 point system, and (c) hold (or previously held) a provisional teaching certificate.

Applicants to a program leading to a Master of Arts in Education Degree must possess a baccalaureate degree and exhibit an undergraduate grade point average of 2.50 or better based on a 4 point system.

An applicant whose undergraduate grade point average is less than 2.5 based on a 4 point system, or whose transcript shows less than a minor of twenty-one (21) semester hours credit in the field of teaching desired in his Master's degree program, may be admitted conditionally. Such students may be given the opportunity of proving their ability to earn a 3.00 grade average in the first 12 hours of graduate credit or be required to complete work on the undergraduate level to reach full admission requirements. Such work may be required in addition to the graduate hours required for the M.A. degree.

Applicants for admission to a program leading to the awarding of a Rank I Classification must have completed requirements for the M.A. degree or the 5th Year Certificate. A grade point average of 3.0 based on a 4 point system is required for unconditional admission to the Rank I program. Students who have earned a 5th Year Certificate are not eligible for admission to certification programs in administration and supervision.

Admission to any program leading to the M.A. degree or 5th Year Certificate is not equivalent to admission to candidacy for the M.A. degree or 5th Year Certificate.

Residence Requirements

A residence of at least one academic year or its equivalent in summer sessions and/or part time work is required. Courses offered by Union College in off campus locations will apply toward the requirement. Although a variety of courses are scheduled in off campus locations, no guarantee is made that all requirements can be met at these locations. Most graduate students find that a portion of their work must be completed on the campus in evening, Saturday, or summer classes.

Admission to Candidacy

Admission to candidacy for the M.A. degree and for the 5th Year Certificate requires formal application to the Office of Graduate Affairs and approval of the Graduate Council. The application is available in the Office of Graduate Affairs and must be filed when the student has:

(1) Shown an aptitude for graduate study by the completion of a minimum of 12 semester hours in residence with a grade point average of at least 2.50 for the 5th year or 3.0 for the M.A. degree.

(2) Satisfied any deficiency in oral or written English that has been reported by a member of the faculty.

(3) Has successfully prepared a written exercise in the Office of Graduate Academic Affairs. The exercise must be written legibly with correct grammar usage and spelling. (The student may repeat the exercise twice if not satisfactory).
(4) Shown evidence of a valid teacher's certificate. The only exception to this is that a limited number of persons are accepted without teaching certificates as noted elsewhere.
(5) Taken the Core battery of the National Teacher's Exam. The Core battery of the National Teacher's Exam includes communication skills, general knowledge, and professional knowledge. Students should plan to take this exam before completing the first 12 hours of graduate work.

Transfer Credit

A maximum of nine semester hours from a recognized and accredited graduate school may be transferred toward the M.A. degree. Requests for transfer credit must be directed to the Dean of Graduate Academic Affairs, be appropriate to the student's planned program, and carry a grade of at least "B". Fifteen semester hours may be transferred toward the Rank I program.

No credit is allowed toward the M.A. degree for courses taken by correspondence or from unaccredited institutions. Transfer credit should have been earned within the five year period prior to graduation (or within eight years if permission is received from the Graduate Dean and Graduate Council). Any exceptions to work earned beyond this time period must be petitioned by the student to the Graduate Council.

Planned Programs

Planned programs are required of all graduate students and are to be completed by the student and an advisor or Dean of Graduate Academic Affairs. The written program constitutes an agreement leading to the M.A. degree and/or certification program.

The planned program should be written during the first semester of graduate work so that all courses completed meet the college requirements. Any changes in the program must be approved by the Dean of Graduate Academic Affairs.

Time Limits

Students are expected to fulfill the requirements of the M.A. degree or advanced certificate within five years from the date of their acceptance into the program. Extension of the time limit may be granted for sufficient reason by the Graduate Dean and/or Council on written petition of the student.

Maximum Credit Loads

The maximum course load for full-time graduate students is fifteen semester hours for a regular semester, six hours per summer term, and three hours for an interim session. Graduate students engaged in full-time employment are restricted to six semester hours for a regular semester and three hours for a summer term. Ten hours per semester constitutes a full load. Students taking 10 or more hours must pay full tuition charges as found under expenses in this catalog.

Credit may not be earned concurrently at another institution without the permission of the Dean of Graduate Academic Affairs, and then only within the total limits indicated above.

Seniors as Part-time Graduate Students at Union

The option to enroll in 400G-level courses is open to seniors lacking no more than six credit hours for graduation and satisfying the following conditions:

1. Have a grade point average of at least 3.0 on all work attempted.
2. Secure the approval of the Dean of the Graduate Studies Program, the student's advisor, and the Registrar.
3. The total student academic load may not exceed twelve credit hours for the semester.
4. All requirements for the undergraduate degree must be completed during the semester or summer in which the student is allowed to register for part-time graduate work.

Graduate credit will be allowed for only those courses beyond the requirements for the undergraduate degree.

In addition to the application for admission to the Graduate Studies Program, the student should fill out a petition form listing the course or courses to be taken to complete the undergraduate degree as well as courses to be taken for graduate credit.

The petition must be approved by both the Dean of the Graduate Studies Program and the Registrar.

Independent Studies, TV Courses, Workshops

A student may take a total of 9 hours in TV courses, workshops, and independent studies at the Master's level, and a total of 12 hours on the 60 hour graduate program (M.A. + 30 or Rank I).

All proposals for independent study must be approved by the Dean of Graduate Academic Affairs. It is the student's responsibility to work with a professor in planning the course of study and to present the proposal for approval no later than three days after the registration date of the semester during which the work is to be accomplished. Forms for independent study must be obtained from the office of graduate academic affairs.

National Teacher's Exam

All students who have begun graduate work since September 1, 1979 must take the NTE before being admitted to candidacy for the **M.A.** degree or Fifth Year Certificate. Please check with the Graduate Office for application form and the dates the NTE is given.

Comprehensive Examination

A comprehensive examination is required for the M.A. degree; it is not required for the award of 5th Year or Rank I classification.

MASTER OF ARTS IN EDUCATION—the candidate is required to demonstrate his professional growth through a three part written examination including the following professional education courses: Educ. 500, 501, 502, 511, 520, 525 and 530.

The examination is scheduled in July, December, and April of each year. Candidates may file an application for the comprehensive examination with the Graduate Office during the semester they complete at least 24 credit hours toward their degree. Students are permitted to take the exam three times. If a student fails the exam and is scheduled to graduate at the end of that term, he/she has an option of taking that part of the exam failed over before a faculty committee or repeating the entire exam the next time it is given. The student is not eligible for an oral exam if he/she fails more than one part of the exam during the term he is scheduled to graduate.

Master of Arts Thesis

Students may opt to write a thesis in partial fulfillment of the requirements for the M.A. degree. The thesis is a systematic, written presentation of the results of a study, investigation or research. Thesis credit will fulfill six of the nine hour elective component of the M.A. program. A student completing a Master's Thesis will be exempt from the comprehensive examination.

The Union College Graduate Council views the Master's Thesis as a completed document that demonstrates a high degree of competence in originality and creativity. Before registering for Educ. 599 (Thesis), the student must complete a total of 15 semester hours of graduate work including Educ. 500 - Educational Research.

Students choosing the thesis route must have an advisory committee of at least 3 faculty members who regularly teach graduate courses. The chairman shall be from the student's major area of interest. At least one member shall be from the area of education, and at least one member shall be from outside the field of education. The Dean of Graduate Academic Affairs shall serve as ex officio member. The names of the committee shall be submitted to the Dean for approval.

A screening committee, appointed by the Dean of Graduate Academic Affairs, shall review the student's proposal to ensure that the problem to be investigated is a significant one, that a thorough review of the literature has been conducted, and that the student is planning to use proper methodology.

The completed draft of the thesis (prepared according to standard guidelines) is to be presented to the chairman of the student's advisory committee at least 30 days before graduation. A final oral examination (conducted by the advisory committee) on the thesis is to be successfully completed 10 days before graduation. Four copies of the completed thesis and an abstract (150-350

words) are to be presented to the Dean one week before graduation.

If the thesis is not completed within two semesters after the student registers for Educ. 599 (Thesis), the candidate must continue to register each semester until the thesis is completed. The student shall pay a continuous registration fee of one credit hour tuition charged each semester until the thesis is completed unless it is otherwise waived by the thesis committee. Exceptions must be recommended by the thesis committee and approved by the Graduate Council.

Detailed information concerning the thesis may be obtained in the Graduate Office.

The Marking System and Quality Points

Marks are reported in letters as follows:

A— Represents distinctly superior work, valued at four quality points for each semester hour.

B— Represents above average work, valued at three quality points for each semester hour.

C— Represents average work, valued at two quality points for each semester hour.

D— Represents inferior but passing work, valued at one quality point.

F— Indicates failure with 0 credits and 0 quality points for each semester hour.

W— Indicates that a student withdrew during the first 12 weeks of the semester.

I— Indicates that in the opinion of the instructor the student has not been able to complete the required work of the course due to unavoidable circumstances.

Incomplete Grade

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolling for that term. If the student is not enrolling, the "I" must be removed before the end of the 12-month period following the date on which the "I" was received.

Any exceptions to the time limit must be made by a written statement initiated by the student and agreed upon by the instructor, registrar, and Dean of Graduate Academic Affairs.

If a course is repeated at Union College, only the second grade is used in computing the student's grade point average.

Course Numbering System

Courses numbered 400G are open to graduate students up to a maximum of 15 credit hours at the M.A. level and 6 credit hours at the Rank I level. Since these courses are available to advanced undergraduate students, care must be exercised to avoid duplication of courses already taken. Dual credit is not allowed in meeting graduation requirements.

Courses numbered 500 are limited to graduate students. Courses numbered 600 are intended primarily for Rank I students although 9 hours of 600 level courses may be taken by M.A. candidates. Any exception to this must be granted by permission of the Dean of Graduate Academic Affairs.

Interdepartmental Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used by any department offering graduate work although they are not shown in the specific catalog listings.

581, 681 "Special Topics"—classes developed on a one-time or experimental basis or a special innovative class

582, 682 Special Workshop

583 Television courses through the Kentucky Educational TV Network

595, 695 Independent Study—research on approved topics not found in regular courses—may be repeated on different topics

599 Graduate Thesis

Expenses and Financial Aid

Graduate Expenses (Regular Semester)

Graduate Tuition, per semester hour	$ 75.00
Full Time Tuition (10 or more hours)	1,950.00
Activity Card (boarding students only)	25.00
Double dormitory room (per semester)	250.00
Private dormitory room (per semester)	325.00
Board (19 Meal Week)	700.00
Married Student Apartment (per month, including utilities)	135.00

FEES

Late Registration Fee*	15.00
Graduate Admission Fee	15.00
Graduation Fee (M.A. and 5th Year)	35.00
Graduation in Absentia Fee	25.00
Transcript (after first free copy)	3.00
Audit fee, per semester hour	15.00
National Teacher's Exam (Core Battery)	45.00
M.A. Comprehensive Exam	5.00

SUMMER EXPENSES (5 Week Summer Session)

Graduate Tuition, per semester hour	75.00
Board, (full five weeks)**	225.00
	(21 meals per week)
Board (short 5 weeks)**	205.00
	(14 meals per week)
Room (Regular)	65.00
Room (Private)	85.00

Short term courses and workshops-less than the time stated would have room and board charges prorated accordingly.

---

*Late registration fee can be waived by the Registrar for sufficient reason if permission is requested in advance.

**Board is subject to change pending contract agreements.

Terms of Payment

Full semester's charges, room, board, tuition, and fees, must be paid no later than registration date. Should the student have an approved loan, scholarship, workshop, workstudy grant or other form of financial assistance, such amount will be deducted from the total charges with the then net amount payable at the time of registration. The Office of Business Affairs can make no exception to this regulation. A student having any unpaid balance will not be cleared for the release of an official report of grades, a transcript of credits, or a diploma.

Financial Charge

A monthly finance charge of one and a half percent (18% annual rate) will be added to any unpaid balance of a student's account during each semester.

Advance Registration

In case of advance registration, if financial arrangements are not completed by the date indicated on the class schedule, the advance registration will be removed from the computer and the registration procedure will have to be repeated.

Refund Policy

Since faculty contracts and other commitments are made by the college for the entire year in advance, the following refund schedule has been established in order that the college and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his/her program.

1. There will be no refund given for room rent unless the decision to withdraw is made by the day of registration. This rule applies to all withdrawals including students dismissed from college.
2. Board will be refunded in full amount unused to the date of withdrawal. A full week is charged for any fraction of a week.
3. Tuition will be refunded on the following basis:
   REGULAR TERM - Twenty percent of total tuition will be charged for each of the first five weeks. No refunds will be made on tuition after the fifth week. Any part of a week will be treated as a full week.
   SEMESTER TERM - Fifty percent of total tuition will be charged the first week and fifty percent the second week. No refunds following the second week. Any part of a week will be treated as a full week.
4. Any registrant who has completed registration and who has failed to attend a single class may have his account credited for the money paid, thus to apply for use on future registration within a twelve-month period. If the student wishes a refund, the Registrar's Office must be contacted **immediately.**
   A student is considered to be enrolled until he formally notifies the Office of the Registrar of his withdrawal and all refunds will be based on the date of notification.

Room Reservation Deposit

Deposit for single dormitory room.....$ 50.00
Deposit for married student apartment $100.00

The deposit will be refunded if the request is made in writing not later than August 1 for the Fall Semester or thirty days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request with the Dean of Students at least 30 days before the end of the term for cancellation of the contract. This deposit will be refunded within 60 days upon receipt of written authorization by the Dean of Students indicating the depositor is no longer enrolled as a student at Union College and that he/she has left the housing facility and equipment undamaged. This request must be made within one year after the end of the academic term during which the student is enrolled. Questions regarding refunds may be addressed to the Dean of Students or appealed to the Vice President for Student Affairs.

Financial Assistance:

Limited financial aid and work-study opportunities are available to graduate students who demonstrate financial need. The Financial Aid Office can supply the necessary application forms. Application should be made two months prior to enrollment.

National Direct Student Loans are available to those with determined need. The interest rate is 5% and repayment begins six months after the student graduates or drops below six hours enrollment.

Guaranteed student loans are available through banks in a student's home state. The interest rate for first-time borrowers is now 9% with a 6-month grace period following less than half-time enrollment.

Students eligible for Veteran's Benefits should contact the Registrar for information concerning procedures required to receive those benefits.

CURRICULA

Degree and Certificate Requirements

Fifth Year Certificate*

All new provisional teaching certificates in Kentucky are issued on the basis of a four-year program and a bachelor's degree. These certificates are valid for an initial period of up to ten years and are renewed on a "completion of a planned fifth year program of college work". The fifth year requirement applies to all public school teachers and may be met through the completion of an approved Master's program or a special certificate program appropriate to the needs of their teaching assignments.

The Fifth Year Program is open to any student who has completed one Teacher Certification Program and who wishes to qualify for Rank II under the Foundation Law of Kentucky.

The student must fulfill the following requirements for the 5th Year Certification:

(1) Plan a 32 semester hour of studies with an advisor or Dean of Graduate Academic Affairs.

(2) Achieve a grade point average of at least 2.50 in the program.

(3) At least 12 semester hours of the program must be in professional education courses.

(4) Twelve hours must be earned in the student's field of specialization.

(5) At least 18 hours of credit must be earned in residence at Union College. Some credit may be approved on the undergraduate level for the program if such training will strengthen the teacher's performance. No credit will be allowed for correspondence study.

The State Department of Education has adopted an option whereby some Continuing Education credit (CEU) and in-service training may be credited toward the certificate.

Students desiring to earn CEU credit(s) at another institution must obtain permission from the Dean of Graduate Academic Affairs to transfer such credit toward the 5th Year Certificate Program at Union College.

Master of Arts in Education

The Master of Arts in Education program is primarily designed for in-service teachers in the public schools. Graduation requirements include the completion of a planned program chosen from the majors following in this section, a minimum grade point average of 3.00, and satisfactory performance on the comprehensive examination. Candidates should review the catalog section on academic information concerning candidacy, transfer credits, time limits, credit loads, etc. A minimum of 15 credit hours must be earned in courses numbered 500 or higher.

Endorsement of Secondary Teaching Certificate for Elementary Level

Union College has a planned curriculum whereby those students who hold a secondary teaching certificate and desire to be endorsed for elementary teaching. The planned program is in accordance with the Kentucky State Department of Education guidelines.

A considerable number of the required courses are graduate level and may be applied to the M.A. degree. Detailed information is available in the Graduate Office.

*Students earning the 5th year certificate are not eligible to enter the principalship or supervisor of Instruction Certification curriculum. However, they may seek Rank I in elementary or secondary teaching.

ELEMENTARY EDUCATION CURRICULUM (M.A.)
(Standard Elementary Certificate and Rank II)*

*All curricula listed meets certification requirements of the Kentucky State Department of Education. Students from states outside of Kentucky are advised to check with their state department of education if certification is desired. An M.A. degree in elementary education does not ensure certification.

(1) **Professional Education** ..... 9 semester hours
EDUC 500 and 520 or 530 and one course chosen from EDUC 501, 502, 511, or 525.

(2) **Specialization Component** ..... 12 semester hours
Non-education courses should be carefully chosen which strengthen the background of the elementary teacher. The following courses are suggested: ENVS 469G, 550; GNSC 401G, 525, 561, 571, 572; MATH 531, 532; HLTH 451G, 582; SOCI 511; PSYH 431G, 470G, 565.

(3) **Electives** ..... 9 semester hours
May be chosen from any of the above courses or other graduate courses. Students electing to continue their training in administration may use these electives to begin an administrative program or strengthen their backgrounds in behavioral science. EDUC 603, 441G and 468G are strongly recommended.

READING SPECIALIST CURRICULUM (M.A.)*
(Standard Elementary or Secondary Certificate, Rank II, and Reading Specialist endorsement)*

(1) **Professional Education** ..... 9 semester hours
EDUC 500 and one course chosen from:
EDUC 501, 502, 511, or 525.
One course may be chosen from:
EDUC 603, 604, SOCI 511.

(2) **Specialization Component** ..... 12 semester hours
EDUC 530, 532, 535, PSYH 525.

(3) **Related Courses** ..... 9 semester hours
One of the following **must** be taken:
ENGL 401G or 421G
Remaining two courses must be taken from the professional Education Component or the following:
PSYH 411G, 431G, 460G, 470G, 565, 600;
EDUC 401G, 468G
The reading specialist program is offered in the summer in odd years.

---

*Applicant must have three years successful teaching experience to obtain the Reading Specialist endorsement.

KINDERGARTEN CURRICULUM (M.A.)
(Standard Elementary Certificate, Rank II, and Kindergarten Endorsement)

(1) **Professional Education** ..... 9 semester hours
EDUC 500, and 520 or 530, and one course chosen from EDUC 501, 502, 511, or 525.

(2) **Kindergarten Component** ..... 12 semester hours
EDUC 440G, 542, and 545.

(3) **Electives** ..... 9 semester hours
These courses should be selected from the other professional courses in (1) above or from ENGL 401G, 421G; ENVS 469G, 550; SOCI 511; EDUC 468G, 603: GNSC 525

The Kindergarten program is offered in the Summer on even years.

HEALTH CURRICULUM (M.A.)
(Standard Secondary Certificate and Rank II)

(1) **Professional Education** ..... 9 semester hours
EDUC 500 and two courses selected from EDUC 501, 502, 511, and 525.

(2) **Health Component** ..... 12 semester hours
Selected from HLTH 411G, 421G, 451G, 475G, 511, 551, 582, 595.

(3) **Electives** ..... 9 semester hours
May be selected from areas (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

ENGLISH CURRICULUM (M.A.)
(Standard Secondary Certificate and Rank II)

(1) **Professional Education** ..... 9 semester hours
EDUC 500, and two courses selected from EDUC 501, 502, 511, and 525.

(2) **English Component** ..... 15 semester hours
EDUC 520 or 530 and four courses chosen from ENGL 401G, 402G, 419G, 421G, 521, 522, 541, 542, 552, 572, or 595.

(3) **Electives** ..... 6 semester hours
May be selected from areas (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

SOCIAL SCIENCE CURRICULUM (M.A.)
(Standard Secondary Certificate and Rank II)

(1) **Professional Education** ..... 9 semester hours
EDUC 500 and two courses selected from
EDUC 511, 501, 502, and 525.

(2) **Social Science Component** ..... 12 semester hours
Selected from PSYH 402G, 411G, 430G,
431G, 452G, 460G, 461G, 470G, 595;
SOCI 421G, 435G, 460G, 461G, 511,
595, HIST 421G, 442G, 446G, 470G, 475G,
531, 551, 595.

(3) **Electives** ..... 9 semester hours
May be selected from area (1) or (2) above or
from other graduate disciplines with approval of
the Dean of Graduate Academic Affairs.

SCIENCE CURRICULUM (M.A.)
(Standard Secondary Certificate and Rank II)

(1) **Professional Education** ..... 9 semester hours
EDUC 500 and two courses selected from
EDUC 501, 502, 511, and 525.

(2) **Science Component** ..... 12 semester hours
Selected from GNSC 401G, 561, 571, 572, 595
ENVS 469G, 550; BIOL 561, 595.

(3) **Electives** ..... 9 semester hours
May be selected from area (1) or (2) above or from
other academic disciplines with approval of the
Dean of Graduate Academic Affairs.

GENERAL EDUCATION CURRICULUM (M.A.)
(Standard Secondary Certificate and Rank II)

(1) **Professional Education** ..... 9 semester hours
EDUC 500 and two courses selected from
EDUC 501, 502, 511, and 525.

(2) **Non-professional Component** ..... 12 semester hours
Non-education courses chosen from any graduate discipline
as part of the planned program to strengthen the
academic specialization of the teacher.
However, two courses in the area of the student's undergraduate
major are strongly recommended.

(3) **Electives** ..... 9 semester hours
May be selected from any graduate offerings.
EDUC 468G and 604 are strongly recommended.
Students electing to continue their training in
administration may use these electives to begin
an administrative program.

ADMINISTRATIVE CERTIFICATION CURRICULA
(M.A. plus 15 semester hours)*

ELEMENTARY SCHOOL PRINCIPAL

The program of preparation for the Professional Certification for School Administration and Supervision, endorsed for the position of Elementary School Principal, shall consist of a minimum of 45 semester hours graduate credit, including the master's degree. The applicant must have completed the graduate program for the Standard Elementary Certificate, and had 3 years of successful teaching experience.

The required courses ** in addition to the M.A. degree include:

1. **Elementary School Curriculum** - EDUC 603
   (Curriculum Development - EDUC 502 or
   Advanced Curriculum - EDUC 600 is a prerequisite).
2. **The Elementary School Principal** - EDAD 655.
3. **Introduction to Counseling and Guidance** - EDUC 401G.
4. **Improvement of Instruction through Supervision** - EDAD 654.
5. **Internship and Seminar in Administration** - EDUC 675.
6. **Tests and Measurements** - EDUC 511.
7. **Methods of Educational Research** - EDUC 500.

---

*Students outside Kentucky desiring Administrative Certification in their respective state should consult appropriate officials in that state for certification requirements.

**Some of the required courses are taken at the M.A. level.

Students holding the standard elementary teaching certificate and Elementary Principalship Certification may acquire endorsement certification as Secondary Principal by fulfilling the following requirements:

1. **The Secondary School principal** - EDAD 656.
2. **Secondary School Curriculum** - EDAD 604.

SECONDARY SCHOOL PRINCIPAL

The program of preparation for the Professional Certificate for School Administration and Supervision, endorsed for the position of Secondary School Principal, shall consist of a minimum of 45 semester hours graduate credit, including the master's degree. The applicant must have completed the graduate program for the Standard High School Certificate, and have 3 years of successful teaching experience.

The required courses* in addition to the M.A. degree include:

1. **Secondary School Curriculum** - EDUC 604.
2. **The Secondary School Principal** - EDUC 656.
3. **Introduction to Counseling and Guidance** - EDUC 401G.
4. **Improvement or Instruction through Supervision** - EDAD 654.
5. **Internship and Seminar in Administration** - EDAD 675.
6. **Tests and Measurement** - EDUC 511.
7. **Methods of Educational Research** - EDUC 500.

---

*Some of the required courses are taken at the M.A. level.

Students holding the standard secondary teaching certificate and secondary principalship certification may acquire endorsement certification as elementary principal by fulfilling the following requirements:

1. **Elementary School Curriculum** - EDUC 603.

2. **The Elementary School Principal** - EDAD 655.

3. **Techniques and Materials for Classroom Reading Instruction** - EDUC 520, or **Diagnostic and Remedial Procedures in Reading** - EDUC 530.

4. Select one of the following courses:
   Teaching Social Studies - EDUC 441G or **Modern Math Laboratory** - MATH 532 or **Science for the Elementary Grades** - GNSC 525.

5. **Internship and Seminar in Administration** - EDAD 675
   Students may fulfill this requirement for both elementary and secondary certification by working with an elementary and secondary principal concurrently.

Students desiring certification in principalship must fulfill requirements for the area of their undergraduate certification. That is, an elementary major who wishes to become a secondary principal must complete requirements for elementary principalship certification prior to or simultaneously with the secondary principalship endorsement. The same applies to a secondary major desiring certification in elementary principalship .

SUPERVISOR OF INSTRUCTION
(K-12)

The program of preparation for the Professional Certificate for School Administration and Supervision, endorsed for the position of Supervisor of Instruction, shall consist of a minimum of 45 semester hours graduate credit, including the master's degree. The applicant must have completed the curriculum of preparation for either the Standard Elementary Certificate or the Standard High School Certificate, and had 3 years of successful teaching experience. Students outside Kentucky should consult appropriate officials in their own state for certification requirements for the position.

The required courses* in addition to the M.A. degree include:

1. **Techniques and Materials for Classroom Reading Instruction** - EDUC 520 or Diagnostic and Remedial Procedures in Reading - EDUC 530 (Teaching of Reading is a pre-requisite). If student has had no reading courses, he/she must take both courses or an appropriate substitute in lieu of one of the above.

2. **Test and Measurements** - EDUC 511.

3. **Improvement of Instruction through Supervision** - EDAD 654.

4. **Internship and Seminar in Administration** - EDAD 675.

5. **School and Community Relations** - EDAD 660.

6. **Psychology of Exceptional Children** - PSYH 565.

7. **Group Processes** - PSYH 640.

8. **Elementary School Curriculum** - EDUC 603.

9. **Secondary School Curriculum** - EDUC 604.

*Some of the required courses are taken at the M.A. level.

Rank I Classification

Kentucky's Rank I classification requires the completion of a planned program of 30 semester hours beyond the Master's level. The program for the Rank I must include a minimum of 12 hours of 600 level courses and may include a maximum of 6 hours of 400G level courses.

Each program is specially planned for the student and requires a conference with the Dean of Graduate Academic Affairs or an Advisor prior to enrollment. Up to 15 hours of credit may be transferred from other graduate institutions if appropriate to the student's planned program and carries at least a grade of "B".

A grade point of at least 3.00 is required for certification and no comprehensive examination is required. Correspondence courses and independent studies may not be transferred into the program.

Although each program is individualized, the guidelines below will prevail in the planning of the program. Some courses may have been taken at the Master's level, and appropriate courses may be substituted with the permission of the Dean of Graduate Affairs.

Students who are admitted to Rank I program must:

(1) Make application. Have two different transcripts sent to Graduate Office, Union College. There is no fee for students who received the M.A. or 5th Year at Union College.

(2) Submit latest certificate earned to Graduate Office.

Students who complete requirements for Rank I must file a request in the Registrar's office for transcripts to be sent to appropriate officials. This applies to **all** students who are completing Rank I for certification or a change in rank or both.

Proper Certification forms are available in the registrar's office and should be secured before the end of the term in which the student is completing his/her work.

ELEMENTARY OR SECONDARY TEACHER (Rank I)

(1) **Professional Education** ..... 9 semester hours (minimum)

Must include EDUC 500, 501, 525, 670
Suggested courses EDUC 511, PSYH 411G, 470G

(2) **Specialization Component** ..... 12 semester hours
Non-education courses. PSYH 565 and 600 are suggested.

(3) **Related Fields** ..... 9 semester hours
To include EDUC 603 or 604, EDAD 630.
EDUC 468G, 502, 600, and 620 are suggested.

ELEMENTARY OR SECONDARY PRINCIPALSHIP
(Principal's Certificate for Grades 1-8 or 7-12, and Rank I)*

(1) **Professional Education** ..... 6-9 semester hours
Must include: EDUC 500, 501, 511.
EDUC 525, PSYH 411G or 470G recommended.

(2) **Specialization Component** ..... 9-12 semester hours
Elementary Principalship **must** include:
EDUC 603, 520 or 530, and EDAD 655.
Secondary Principalship **must** include:
EDUC 604, EDAD 656.
Elementary Principalship or Secondary Principalship
must include: EDUC 401G, EDAD 654, 675
Suggested courses: SOCI 511, PSYH 565, 600,
EDAD 630, 640, 650, 660.

(3) **Related Courses** ..... 9-12 semester hours
Must include EDUC 502 or 600, 670.
Suggested: EDAD 645.
A minimum of four 600 level courses are required; a maximum of two 400G level courses may be taken. Three years of successful teaching experience at the level of certification is required for the Principalship endorsement.

---

*Students seeking certification in another state (outside Kentucky) should consult directly with that state for required courses.

SUPERVISION OF INSTRUCTION
(Supervisor's Certificate, Grades 1-12, and Rank I)*

(1) **Professional Education** ..... 9-12 semester hours
Must include: EDUC 500, 511, 670
Suggested courses: EDUC 525, PSYH 411G, 470G, EDUC 501

(2) **Specialization Component** ..... 9-12 semester hours
Must include: EDAD 654, 660, 675
PSYH 565 and 640.
(If all are needed, one may be applied to Component 3.)

(3) **Related Fields** ..... 6-9 semester hours
Must include:
Six hours of reading courses, EDUC 520 or 530, 620
(An undergraduate reading course may substitute for one).
Must also include: 603, 604
Suggested courses: EDUC 468G, PSYH 600, EDAD 630.
A minimum of four 600 level courses are required: a maximum of two 400G level courses may be taken.

---

*Students outside Kentucky should consult appropriate officials in their own state for certification requirements for the position.

Course Descriptions

Each course is offered for three semester hours of credit unless otherwise noted.

BIOLOGY

BIOL 561. Topics in Biological Science

A lecture and discussion approach to topics and issues of contemporary importance and interest in the biological sciences. One topic will be extensively explored each term or semester that the course is offered. The course may be repeated when an alternate topic is emphasized. Possible topics include: Cancer, Immunobiology, Human Evolution, Human Reproduction and Development, Human Genetics, Plants and People, etc.

BIOL 595. Research Investigations

An independent research problem in which the student must demonstrate his ability to employ the scientific method in carrying out an original scientific investigation. A typewritten and bound manuscript will be required. An examination may or may not be given, depending on the nature of the problem selected. Prerequisite: Permission of the instructor and approval of the head of the department.

EDUCATION

EDUC 401G. Introduction to Counseling and Guidance.

Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges and related service oriented agencies. Includes essential counseling and guidance services, policies, practice and procedures.

EDUC 435G. Laboratory Experiences in Education.

A substitute for student teaching for elementary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. Classroom teaching experiences with elementary children are included. Prerequisite: One year of successful classroom teaching experience. Summer only.

EDUC 440G. Introduction to Early Childhood Education.

Survey of the physical, emotional, mental, and psychological development of the child under six, and the role of the kindergarten teacher in working with such a child.

EDUC 441G. Teaching Social Studies.

Methods and materials for the teaching of elementary school social studies including kindergarten through eight curricula. The philosophies, terminology, and evaluation methods and materials will be included.

EDUC 468G. Educational Media.

Gives practice in operating educational media and construction of classroom materials. Emphasis given to educational television use in the classroom.

EDUC 500. Methods of Educational Research.

Types of research, selection of problems, collection and classification of data; organization ,presentation, and interpretation of materials. Includes unit on computer use and practice.

EDUC 501. History and Philosophy of Education

Historical antecedents of American education. An analysis of the growth of various educational philosophies and the relation of these to modern educational practice.

EDUC 502. Curriculum Development

Curricula organization, materials, and methods. Techniques for evaluating and constructing curricula.

EDUC 510. Basic Statistics.
Designed to aid teachers and administrators in their understanding and use of elementary statistical terminology and procedures. A limited set of statistical concepts useful in analyzing data from published research is presented as part of the course.

EDUC 511. Tests and Measurements.
Instrument and techniques for evaluating abilities, aptitudes, personality traits, and interests examined and teacher-made evaluative instruments given special emphasis. Application of test results to vocational and educational guidance stressed.

EDUC 520. Techniques and Materials for Classroom Reading Instruction.
A foundation course which includes a general review of the following reading skills: Word recognition, comprehension, and fluency. Also, an in-depth study of the various approaches to teaching, reading will be included. Students will become familiar with various techniques of instruction, the organization of the reading program, and a variety of reading materials. Simple methods of diagnosis are discussed.

EDUC 525. Philosophies and Techniques of Teaching .
The course has two main purposes. One, to immerse the student in the history, philosophy and implementation of the five main philosophical approaches to teaching - essentialist, experimentalist, reconstructionist, existentialist and perennialist. Two, to involve the student in learning about and utilizing a variety of teaching techniques. Major emphasis placed on students developing a rationale and strategy for incorporating these ideas in the classroom setting. Pre-requisite: Educ. 501 or permission of the instructor.

EDUC 530. Diagnostic and Remedial Procedures in Reading.
Current research findings in diagnostic and remedial procedures in reading. Techniques for applying diagnostic instruments for locating causes of serious reading deficiencies are developed, along with suggested remedial procedures.

EDUC 532. Techniques and Materials for Remedial Reading.
Techniques and materials appropriate to the diagnosis and correction of reading difficulties. Course requirements include auditory and visual screening, diagnostic testing, and conduction of a clinical case study. Prerequisite: Education 530.

EDUC 535. Practicum in Teaching Reading with Clinic.
Practice involving traditional and behavioral science methodologies for remediation of reading disabilities. Extensive experience using group methodology that employs operant conditioning, repondent, and perceptual learning paradigms. Normally taken concurrently with Psychology 525 - Psychology of Reading.

EDUC 542. Fundamentals of Kindergarten Education .
This course focuses on kindergarten curriculum, materials, organization of the kindergarten program, creative experiences for the pre-school child, parent education and home visitation, understanding of families, community resources, planning learning experiences, and evaluation of pupil programs and progress. Direct observation and participation in the kindergarten setting.

EDUC 545. Practicum in Kindergarten Education. (Six hours credit)
This course offers direct, guided, supervised experience with kindergarten children under the supervision of a qualified kindergarten teacher.

EDUC 560. Supervision of Student Teaching.
Designed for classroom teachers who assume the responsibility of supervising student teachers. Experiences deemed necessary for developing students into effective teachers are considered. Prerequisite: One year of teaching experience or consent of the instructor.

EDUC 561. Internship for the Supervising Teacher. (Two-four hour credits)
A follow up course for Education 560, primarily in the field with part time on the campus in seminars, reports of action research with and about student teaching, honors teaching, and evaluation. Open only to those who have had Education 560 and who have a student teacher during the course.

EDUC 573. Use of Computers in Education Research.
Procedures for using computers to handle the statistical analysis of education research data. Prerequisites: Education 500.

EDUC 595. Graduate Independent Study. (one-three hours)
Guided study and research toward the solution of specific educational problems encountered by students. Open to students at 5th year level.

EDUC 599. Thesis (by arrangement) — Six hours credit

EDUC 600. Advanced Curriculum .
Study of theory, principles, practices, procedures in current curriculum development and reorganization. Prerequisites: Education 502, 603, or 604 or by permission of professor.

EDUC 603. Elementary School Curriculum.
Curricular organization, materials, and methods currently used in elementary schools. Techniques for evaluating and constructing curricula.

EDUC 604. Secondary School Curriculum.
Curricula organization, materials, and methods currently used in secondary schools. Techniques for evaluating and constructing curricula.

EDUC 620. Teaching Reading in the Content Field.
Consideration of provisions and procedures for developing reading skills needed at the upper elementary and junior-senior high school level; various types of reading improvement programs, reading tests, and remedial programs at the upper grade levels. Education 520 or 530 recommended as prerequisites.

EDUC 670. Directed Field Project.
Required of all students who are seeking Rank I Classification. The student may work on a special project in his/her school or school system and may register any term to complete the work within six months from the time of registration. Prerequisites: Education 500 highly desirable; student must confer with instructor and have earned 12 hours toward Rank I.

EDUC 695. Graduate Independent Study.
Guided study and research in area pertinent to the needs of the student at the 6th year level.

EDUCATIONAL ADMINISTRATION

EDAD 630. School Law.
History of legal provisions for public education in the United States, interpretation and application of present school law, federal and state.

EDAD 640. School Finance and Business Management.
Federal, state and local financing of schools, equalization of education opportunities, sources of school revenue, school budgets, business methods of accounting.

EDAD 645. School Organization and Administration.
Organization of the modern public school, an understanding of such problems as staff-teacher relationships, program of studies, teacher records and reports, personnel and public relations, utilization of teacher time and physical facilities.

EDAD 650. School Plant and Transportation.
Planning, construction and maintenance of school plants. Also considers operation and administration of program for pupil transportation .

EDAD 654. Improvement of Instruction Through Supervision.
Techniques and methods for improving and evaluating classroom instruction in a modern day setting.

EDAD 655. The Elementary School Principal.
An analysis of the role of the principal in the modern elementary school.

EDAD 656. The Secondary School Principal.
An analysis of the role of the principal in the modern secondary school.

EDAD 660. School and Community Relations.
An examination of school-community relationships. Special emphasis on leadership roles, operational modes, communication with regard to public school relations.

EDAD 675. Internship and Seminar in Administration.
A total of 90 block hours in a practicum situation under a qualified administrator is required with a written record of experiences. Student qualifying for certification in Supervisor of Instruction must have experience under a general supervisor; students qualifying for elementary principalship must work under an elementary principal; students qualifying for secondary principalship must work under a secondary principal. Two seminars are held on campus. Prerequisites: EDAD 654 and EDAD 655 or 656.

ENGLISH

ENGL 401G. Modern Grammar.
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent development in generative semantics. Considerable attention paid to the possibilities of practical application of linguistic theory. Even years only.

ENGL 402G. Advanced Composition.
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student.

ENGL 419G. Composition for Teachers.
Review of basic elements of composition with regular writing assignments in both expository and argumentative modes. Techniques of marking and evaluation of student papers. Research techniques, a methodology for teaching students to develop a research paper and practical application of the methodology through the assignment of a research paper as an integral part of the course itself. (Odd years only).

ENGL 421G. History of the English Language.
A study of the origins and development of the English language from Anglo-Saxon times to the present. Supplementary readings in early and medieval English history with emphasis on the effects of historical events on language change.

ENGL 521. Advanced Study of English Literature, 500-1700.
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 522. Advanced Study of English Literature, 1700-Present.
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 541. Advanced Study of American Literature, 1600-1860.
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 542. Advanced Study of American Literature, 1860-Present.
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 552. Advanced Study in Linguistics.
Intensive study of some phase of linguistics depending on the needs and interests of the student. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 572. Special Topics in Literature.
Intensive study of a literary topic of special interest to secondary teachers. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 595. Independent Study in English.
Independent study of research on an approved topic. May be repeated for credit.

ENVIRONMENTAL STUDIES

ENVS 469G. Appalachian Environmental Workshop.
A workshop for in-service teachers and senior level undergraduates, with emphasis on environmental education and issues. The course treats physical, ecological, cultural and socio-economic aspects of the Appalachian setting.

ENVS 550. Environmental Education Strategies.
A two-week workshop designed to foster a greater understanding of our environment through a combination of classroom and direct first-hand experiences. Conducted in cooperation with the USDA Forest Service and the Kentucky Division of Forestry. Offered in Summer only.

GENERAL SCIENCE

GNSC 401G. Science: Concepts, Processes, and Inquiry
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, and experimenting. With the laboratory materials from the new science programs, he/she will explore their use in teaching children these processes. As materials from such programs as ESS, SCIS, IME, IIS, ISCS, PSSC, PHYSICS, CHEM, are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching a science will be stressed, along with individualized instruction, learning theory, laboratory equipment use (commercial and handmade) and multimedia instruction.

GNSC 525. Science for the Elementary Grades.
Explores the nature of science, concepts of science, and processes of science. Deals with the production of inexpensive lab materials, inquiry activities, simulation games, and metric system.

GNSC 561. Topics in Physical Science.
Enrichment and updating of elementary and high school teachers on selected topics in astronomy, physical science and modern physics. Selected scientific American off prints will be reviewed. Course will include several lecture demonstrations and hands on experience with some laboratory equipment.

GNSC 571. Aerospace Workshop.
A workshop for teachers offered during the summer session and conducted in cooperation with the National Aeronautics and Space Administration. Lectures and demonstrations given by NASA space scientists on such topics as astronomy, physics, earth science, and biology. No prior knowledge of space science is required and each student is required to develop a teaching unit on space science suitable for use in the grade or subject he/she teaches.

GNSC 572. Space Science Topics.
A follow-up workshop in the summer utilizing the additional services of the U.S. Air Force, Civil Air Patrol, U.S. Weather Service, and other governmental agencies in the development of concepts resulting from space age technology.

GNSC 595. Independent Study.

HEALTH

HLTH 411G. Health Education in the Secondary School.
The experience, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

HLTH 421G. Community Health.
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

HLTH 451G. School and Community Health Workshop .
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

HLTH 475G. Critical Areas in Health.
Specific health problems confronting society today with particular reference to secondary age students.

HLTH 511. The School Health Program.
Administrative arrangements found in school health programs and the utilization of administrative techniques and school personnel in conducting an efficient health program.

HLTH 551. Readings in Health.
A course enabling the student to research the literature in the area of health, not only to increase his basic knowledge, but to acquaint him with current trends and issues.

HLTH 582. Safety Workshop.
Accident problems in the home, in the school, at work, and on the highways are discussed with the purpose of being able to influence those who teach by preparing them in the various areas of safety. Groups specialized in a variety of safety areas, such as National Safety Council, American Red Cross, Bureau of Mines, and Kentucky State Police will be utilized.

HLTH 595. Independent Study.
Independent study in the field of health. May include practical field experiences.

HISTORY

HIST 421G. The Middle Period (1821-1850).
A detailed examination of Jackson, politics, and the culture of the period. Emphasis is on the Age as one of chaos and concerns the conflicting interpretations of the period.

HIST 442G. Britain in the 20th Century.
The history of Great Britain since 1900.

HIST 446G. History of Russia.
The history of Russia since the 17th century.

HIST 470G. Twentieth Century America.
Selected topics on the Nation's history since 1900.

HIST 475G. Special Topics in History.
Designed for teachers in special areas of interest.

HIST 531. The American Revolutionary Era.
The background of the revolution. Continental Congress and the Confederation at work; internal problems and strife; military and naval events; foreign relations; the road to final independence and peace. Even years only.

HIST 551. Civil War and Reconstruction.
A study of the Civil War and Reconstruction period in American history.

HIST 595. Independent Study. (by arrangement)

MATHEMATICS

MATH 531. Topics in Modern Math for Elementary Teachers.
A study from a theoretical viewpoint of some topics in mathematics that are taught in elementary school. The course will begin with a study of logic and include topics selected from sets; arthimetical operations on the whole numbers, the integers, rational numbers and real numbers; numeration systems; some elementary number theory; measurement; other topics in informal geometry. This course is required for a graduate student wishing endorsement of his/her high school certificate for elementary teaching. Credit will not be granted for this course to a student who has completed both Math 203 and 204.

MATH 532. Modern Math Laboratory.
An active involvement in laboratory experiments with multibase blocks, sets, Cuisenaire rods, geoboards, etc.; development of skills in the production and use of place value charts, math balance, fraction bars, games, etc.; creation of a mathematics learning center for the classroom along with the appropriate activity cards for each module. Prerequisites: Math 531 or Math 203, 204.

MATH 595. Independent Study.

PSYCHOLOGY

PSYH 402G. Counseling Theories and Techniques.
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing.

PSYH 411G. Educational Psychology.
Basic concepts related to mental development, appraisal and diagnosis, and learning theory applicable to educational practices.

PSYH 430G. Social Psychology.
A study of psychology as it related to society, culture and political-economy. Much of the focus of the course will be to create a linkage between the theoretical concerns of social psychology and the activity we are involved with most often, work.

PSYH 431G. Mental Hygiene.
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustments.

PSYH 452G. Abnormal Psychology.
Mental disorder, changing concepts of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

PSYH 460G. Theories of Personality.
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological, and stimulus-response theories included.

PSYH 461G. History and Systems of Psychology.
Origins of psychological thought within science and philosophy, tracing the development of systems and theories with German, British, and American psychology.

PSYH 470G. Theories of Learning.
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

PSYH 525. Psychology of Reading.
Theory and applications of learning principles as applied to the reading processes. Major emphasis relates to respondent, operant, and perceptual learning paradigms.

PSYH 565. Psychology of Exceptional Children.
Survey course of children with special educational needs. The nature, cause and intervention of exceptionality.

PSYH 595. Independent Study.

PSYH 600. Advanced Human Growth and Development.
Psychological development from birth to maturity. Emphasis upon the principal concepts and problems in the development of the individual.

PSYH 640. Group Processes.
A study of theory and practice in group dynamics. The process and implications of group processes, group counseling, and the human potential orientation are explored.

SOCIOLOGY

SOCI 421G. Rural and Urban Sociology.
Comparative and interrelated study of urban and rural life considering the physical, institutional, social and economic factors of modern life in cities and in the countryside.

SOCI 435G. Labor Relations in Appalachia.
The restricted focus of this seminar will be an analysis, in historical and contemporary perspectives, of labor relations in central and southern Appalachia. While some attention will be given to various manufacturing activities including chemicals, clothing, furniture, brick-making and iron-making, emphasis will center upon work relations in coal and textile communities.

SOCI 460G. Sociological Theory.
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

SOCI 461G. Criminology.
Explicate and analyze the relationship of crime to the larger social structure, the community, and the individual. Develop an understanding of some of the more significant social and political implications of the study of crime, aid the student in comprehending the important contemporary issues such as the role of the state and the citizen in the suppressing of crime, incarceration, and crimes of the powerful.

SOCI 511. Educational Sociology.
An analysis of schooling and education in a social, historic, and economic perspective. Special attention is given to the socialization of the child within and outside the school in light of the dominant culture forces in Western Society.

SOCI 595. Independent Study.

College Personnel

Graduate Studies Program Administration

Jack C. Phillips, LL.D. ..... *President*
Dwight C. Stewart, Ph.D. ..... *Dean of the Faculty*
H. Warren Robbins, Ed.D. ..... *Dean of Graduate Academic Affairs*
E. Edwin LeMaster, M.A. ..... *Registrar*

GRADUATE COUNCIL
1982-93

H. Warren Robbins ..... *Dean of Graduate Academic Affairs*
Edward H. Black ..... *Vice President for Administration*
Robert D. Carey ..... *Professor of Education*
Jan M. Finkel ..... *Associate Professor of English*
Arthur H. Hafner ..... *Professor of Education*
Robert C. Landis ..... *Graduate Student Representative, M.A. Program*
Jean L. Letch ..... *Associate Professor of Education*
Deril K. Mays ..... *Professor of Psychology*
Bettye G. Moody ..... *Graduate Student Representative, Rank I Program*
Frances Patridge ..... *Vice President for Student Affairs*
Dwight C. Stewart ..... *Dean of the Faculty*
Robert W. Swanson ..... *Assistant Professor of Environmental Studies*
John C. Taylor ..... *Assistant Professor of History*
Lester G. Woody ..... *Professor of English*
Jack C. Phillips ..... *(ex officio), President*

Faculty

ROBERT D. CAREY, *Professor of Education*
B.S., University of Denver; M.A., George Peabody College for Teachers; Ph.D., Stanford University

SANTARAM CHILUKURI, *Professor of Physics*
B.S., M.S., Ph.D., Andhra University, India

DIANNE R. FERRIS, *Associate Professor of English*
B.A., University of Minnesota; M.A., Ph.D., University of Washington

JAN M. FINKEL, *Associate Professor of English*
A.B., Wittenberg University; M.A., Ph.D., Indiana University

JEAN L. LETCH, *Associate Professor of Education*
B.A., Iowa State Teachers College; M.S., Ed.S., University of Northern Iowa, Ph.D., University of Iowa.

JACK L. LUZKOW, *Assistant Professor of History*
B.A., Wayne State University; M.A., Ph.D., Saint Louis University

DERIL K. MAYS, *Professor of Psychology*
B.S., Union College; M.A., University of Kentucky; Ed.D., University of Tennessee

PAUL S. MOORE, *Professor of Health and Physical Education*
B.A., Union College; M.S., University of Tennessee; Ed.D., University of Alabama

FRANCIS E. NUSSBAUM, JR., *Professor of Biology*
B.S., Ohio University; Ph.D., Michigan State University

H. WARREN ROBBINS, *Professor of Education*
B.S., Eastern Kentucky University; M.A., George Peabody College for Teachers; Ed.D., University of Tennessee

ROY SILVER, *Assistant Professor of Sociology*
B.A., University of Toledo; M.A., Queens College, CUNY; Ph.D., University of Toledo

DWIGHT C. STEWART, *Professor of Philosophy*
B.A., Culver-Stockton College; M.Div., Drake University; A.M., Harvard University; Ph.D., Northwestern University

ROBERT W. SWANSON, *Assistant Professor of Environmental Studies*
B.S., Purdue University; M.A., Ed.D., Indiana University

JOHN CRAFT TAYLOR, *Assistant Professor of History*
B.A., Juniata College; J.D., Duke University; M.A., Ph.D., Pennsylvania State University

DORIS B. THOMPSON, *Assistant Professor of Education*
B.S., Livingston University; M.A., Ph.D., University of Alabama

ANDELYS WOOD, *Associate Professor of English*
A.B., Middlebury College; Ph.D., Indiana University

LESTER G. WOODY, *Professor of English*
B.A., University of Virginia; M.A., University of Richmond; Ph.D., University of North Carolina

Adjunct Faculty

VIVIAN B. BLEVINS
B.Ed., University of Toledo; M.A., Eastern Kentucky University; Ph.D., Ohio State University

JOHN H. BOYD
A.B., Western Kentucky State University; M.A., Ed.D., University of Kentucky

ROBERT L. GATTON
A.B., M.A., Union College; Ed.D., University of Florida

ARTHUR H. HAFNER
Ph.D., Muhlenberg College; M.A., Lehigh University; Ed.D., Teachers College, Columbia University

ROBERT HAYES
B.A., Berea College; M.A., Eastern Kentucky University; Ed.D., University of Alabama

JOYCE SUE HOPSON
B.S., Lincoln Memorial University; M.A., Union College; Ed.D., University of Tennessee

KENIMER H. MORGAN
A.B., M.A.Ed., Mercer University; Ph.D., George Peabody College for Teachers

DAVID B. PETERSON
B.A., Tusculum College; M.A., Ed.D., East Tennessee State University

MARSHALL E. RASNAKE
B.S., University of Tennessee; M.A., Teachers College, Columbia University; Ed.S., University of Tennessee; Ed.D., Memphis State University

JOANN G. SEYMOUR
B.S., Bob Jones University; M.A., Mississippi State University; Ph.D., Texas A&M University

JEAN J. SHELTON
A.B., M.A., University of Louisville; Ph.D., Southern Methodist University

JAMES F. SIMPSON
B.S., Cumberland College; M.A., University of Tennessee; Ph.D., Vanderbilt University

MURRELL P. STEWART
B.S., M.A., Eastern Kentucky University; Ed.D., University of Kentucky

WARREN P. TILLER
B.S., Pikeville College; M.A., Union College; Ed.S., Morehead State University; Ed.D., East Tennessee State University

JOHN E. YATROS
B.S., Concord College, Virginia; M.A., West Virginia University; Ed.D., Indiana University

INDEX

	Page
Administration	33
Admission to the Graduate Studies Program	10
Biology, courses in	25
Calendar 1981-82	6
Candidacy for Degrees	10
Comprehensive Examinations	12
Course Numbering System	13
Credit Load	11
Education, courses in	25
Educational Administration, courses in	27
Elementary Education Curriculum	18
Elementary School Principal Curriculum	21
English, courses in	28
English Curriculum	19
Expenses and Financial Aid	14, 15
Fifth Year Certificate	17
General Secondary Education Curriculum	20
General Science, courses in	29
Graduate Council and Faculty	33
Health, courses in	30
Health Curriculum	19
History, courses in	30
History of Union College	3
Housing	8
Independent Study	12
Kindergarten Curriculum	19
Learning Resources	8
Master of Arts Curriculum	17
Mathematics, courses in	31
Mission of the College	2
Planned Programs	11
Psychology, courses in	31
Rank I Classification	23
Reading Specialist Curriculum	18
Residence Requirements	10
Science Curriculum	20
Secondary School Principal Curriculum	21
Social Studies Curriculum	20
Sociology, courses in	32
Supervisor's Certification Curriculum	24
Time Limits on Degrees	11
Transfer Credits	11

UNION COLLEGE
APPLICATION FOR GRADUATE STUDY

DEGREE / CERTIFICATION SEEKING STUDENTS: This application, a copy of the teaching certificate and the $15 admission fee should be mailed to the Graduate Office, Union College at least 7 days prior to the beginning of the session in which entrance is proposed. Two official transcripts of the applicant's complete academic record must be sent **directly to the Office of Graduate Affairs from the institution where the degree was received, or graduate work was completed. STUDENTS SHOULD NOT MAIL TRANSCRIPTS WITH APPLICATION. Applicants holding the baccalaureate degree or a Master's degree from Union College need not submit these transcripts. The admission fee is waived for students seeking Rank I and who have earned the M.A. degree from Union College.

**TRANSIENT STUDENTS: This application and the $15 admission fee should be mailed to the Graduate Office. Students may have either a letter of good standing sent from the institution they are transferring work to OR have two official transcripts of the undergraduate work sent to the Graduate Affairs Office. APPLICATION TO THE GRADUATE STUDIES PROGRAM DOES NOT AUTOMATICALLY ADMIT A STUDENT TO GRADUATE STANDING. The application will be processed and the student will be notified concerning his standing.

(PLEASE USE LEGAL NAME ONLY)

Miss
Mr. _____ Date _____
Mrs. Last Name First Name Middle

Spouse _____ Mrs. Maiden Name _____

Home Address _____
Street & Number City State Zip Code

Home Phone (___) _____ School Phone (___) _____ S.S. No. _____

Place of Birth _____ Date of Birth _____

Place of Employment _____

High School Attended _____ Date of Graduation _____

Colleges or Universities Attended:

Undergraduate _____ Dates _____ Degrees _____

Graduate _____ Dates _____ Degrees _____

Undergraduate Work _____ Second Major or Minor _____

Do you plan to work toward a degree at Union? _____ What Semester? _____

Are you working toward certification? _____ Are you a transient student? _____

Have you taken the National Teacher's Exam? Yes _____ No _____

Program of study you plan to pursue: ( )M.A., ( )Rank I, ( ) + 30, ( ) + 45, ( )5th Year

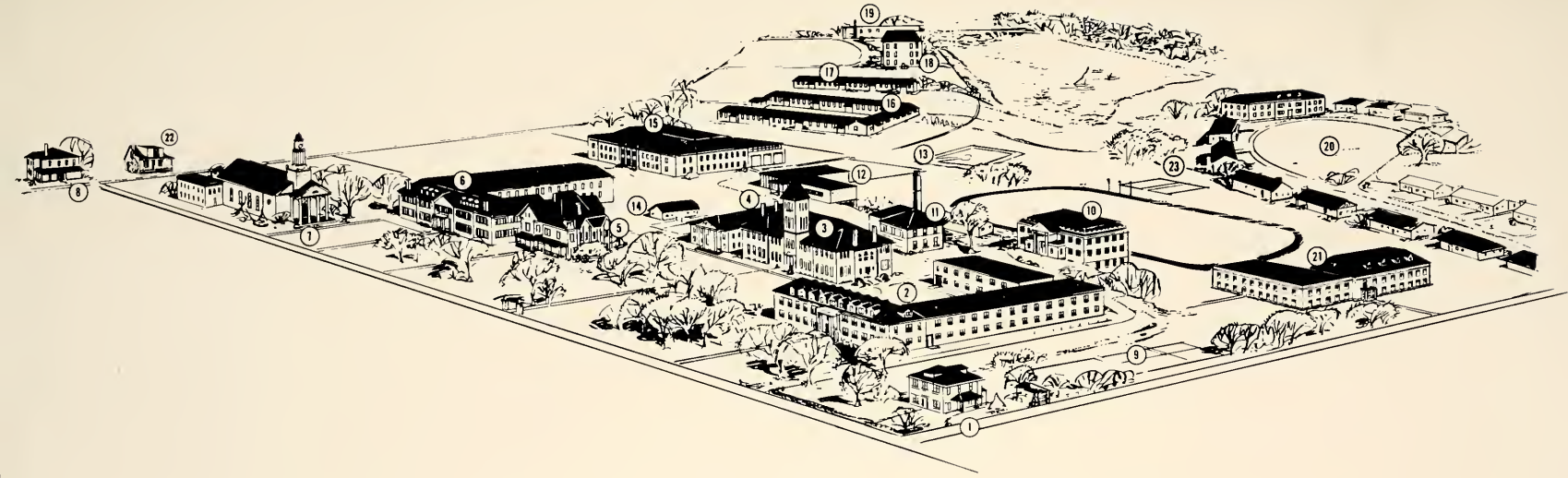
Do you hold a valid professional teaching certificate? Yes _____ No _____

What State? _____ Kind of Certificate _____ Cert. No. _____

For What Grades _____ For What Subjects _____

I certify that the above statements are correct and complete to the best of my knowledge.

Signed _____ Date _____



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Centennial Hall
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Tye House
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts

UNION
COLLEGE

BARBOURVILLE
KENTUCKY 40906
606/546-4151

S.B. Newman Printing-Knoxville

UNION COLLEGE

1984-85
Catalog

CONTENTS

Welcome to Union College 1
Statement of Purpose 3
Special Information 6
Admissions 12
College Expenses 14
Financial Assistance 16
General Information 27
Curriculum 33
Campus Information 85
Calendar 92
Administration and Staff 96
Faculty 97
Index 101
Application Form 103

DIRECTORY FOR CORRESPONDENCE

Academic Work . . . . . *Vice President for Academic Affair*
Admission to the College . . . . . *Director of Admission*
Admission to the Graduate Program . . . . . *Dean of Graduate Academic Affair*
Alumni Affairs . . . . . *Director of Alumni Affair*
Applications for Admission, Catalogs . . . . . *Director of Admission*
Charges and Payment of Bills . . . . . *Business Manage*
Gifts and Bequests . . . . . *Vice President for Developmen*
Personal Welfare, Health of Students, Housing . . . . . *Vice President for Student Affair*
Grants, Scholarships, Work-study and Loans . . . . . *Director of Financial Ai*
Transcripts, Academic Records, Veterans Affairs . . . . . *Registra*

TELEPHONE COMMUNICATION

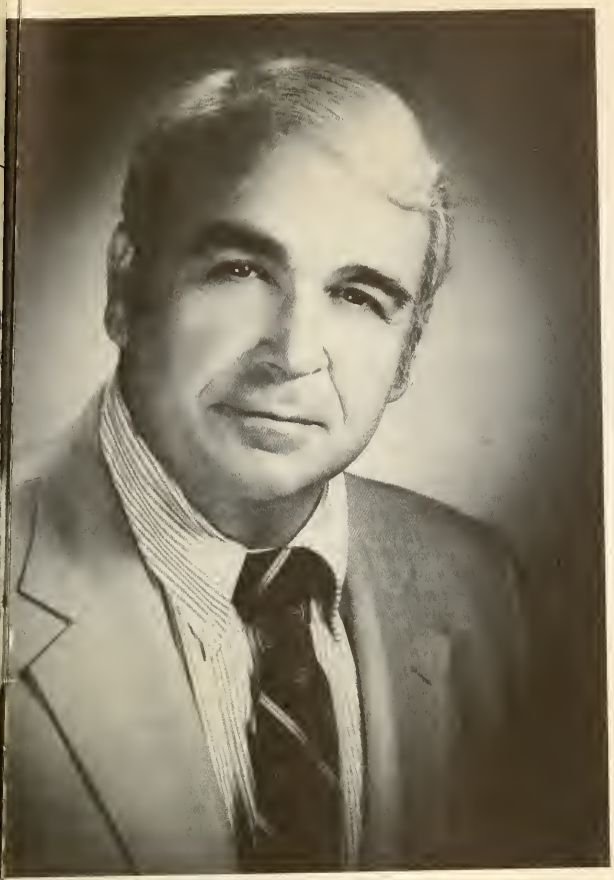
A campus-wide network of telephones enables the caller to reach any administrative or staf office by dialing the central switchboard. After 11 p.m., emergency calls for students may be directed to their dormitory counselors.

Central Switchboard . . . . . **(606) 546-4151**
Counselor, Pfeiffer Hall . . . . . (606) 546-3421
Counselor, Stevenson Hall . . . . . (606) 546-3659

Union College is accredited by the Commission on Colleges of the Southern Association o Colleges and Schools, the Kentucky State Department of Education, and is approved by the University Senate of the United Methodist Church.

It is the policy of Union College not to discriminate on the basis of sex, race, color, handicap age, or national or ethnic origin in the admission of students, in its administration of educational programs, scholarships, loan programs, or other school-administered programs, or in athletic participation. Inquiries should be directed to Mr. Edward H. Black, Affirmative Action Officer.

While this catalog presents information as accurately as possible as of the date of publication, the College reserves the right to make such changes as future circumstances may require.



R. JACK C. PHILLIPS

Welcome To Union College

We welcome you, and invite you to examine Union College. Founded in 1879 by Barbourville citizens, and purchased in 1886 by the Methodist Episcopal Church, Union sees its principal mission as one of service to the Appalachian area of Southeastern Kentucky, Eastern Tennessee, and Southwestern Virginia.

With an enrollment of nearly 900, including both graduate and undergraduate students, Union College is committed to excellence in its academic program. The College offers the Bachelor of Arts, the Bachelor of Science, the Bachelor of Music, and the Master of Arts in Education degrees. It also offers a Rank I Program beyond the Masters level as well as various Associate Degree and certificate programs.

Located on the historic Wilderness Road, Union is the oldest college in this tri-state area. Union College now has 7990 graduates, with 3051 of these having received the Master of Arts in Education degree.

I am glad that you are interested in our college and hope that you will like what you see in these pages. In fact, we hope you like it so much that you will join us for many happy and profitable experiences.

Sincerely,

Jack C. Phillips

Jack C. Phillips
President

An Invitation

The doors of Union College are open to all who aspire to a more fulfilling life, without regard to race, color, sex, handicap, national or ethnic origin.

Affiliated with The United Methodist Church, Union is a nonsectarian, co-educational institution with four-year undergraduate courses plus a graduate program.

There is an open invitation to all prospective students to arrange a visit to the campus by calling the Admissions Office (606-546-4151).

A History of Service

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880, the first building was formally opened on the site of what is now known as Centennial Hall.

The College was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building (now known as Centennial Hall).

The college department was discontinued in 1908, and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a *bona fide* college again in the presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the President were built. In 1927, the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. In 1931, Union was accredited by the University Senate of the Methodist Episcopal Church, and in 1932, full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937.

In Conway Boatman's twenty-one years of leadership, the College achieved marked progress in both its educational programs and in plant improvement. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960, a Master of Arts in Education degree program was introduced, and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

President Jack Carter Phillips began his duties at Union College in January, 1983.

Dr. Phillips earned the Bachelor's Degree at Birmingham-Southern College and the Master of Divinity Degree at Vanderbilt University. He received an honorary Doctor of Laws Degree from Union College in 1981. He was lauded at that ceremony for

"notable achievement in the field of institutional fund raising and, in particular, service to the colleges and universities related to The United Methodist Church."

A native of Scottsboro, Alabama, Dr. Phillips served in the U.S. Marine Corps from 1954 to 1957.

The College has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community-service projects, and new career-oriented curricula.

STATEMENT OF PURPOSE
(Mission Statement)

Union College is an independent institution of higher education affiliated with the United Methodist Church. It is dedicated to maintaining an academic environment that stimulates intellectual curiosity and scholastic competence, encourages an understanding of and commitment to the Christian faith, and undergirds the development of the whole person, so that students will develop the human resources needed to live creatively and wholesomely in a changing world.

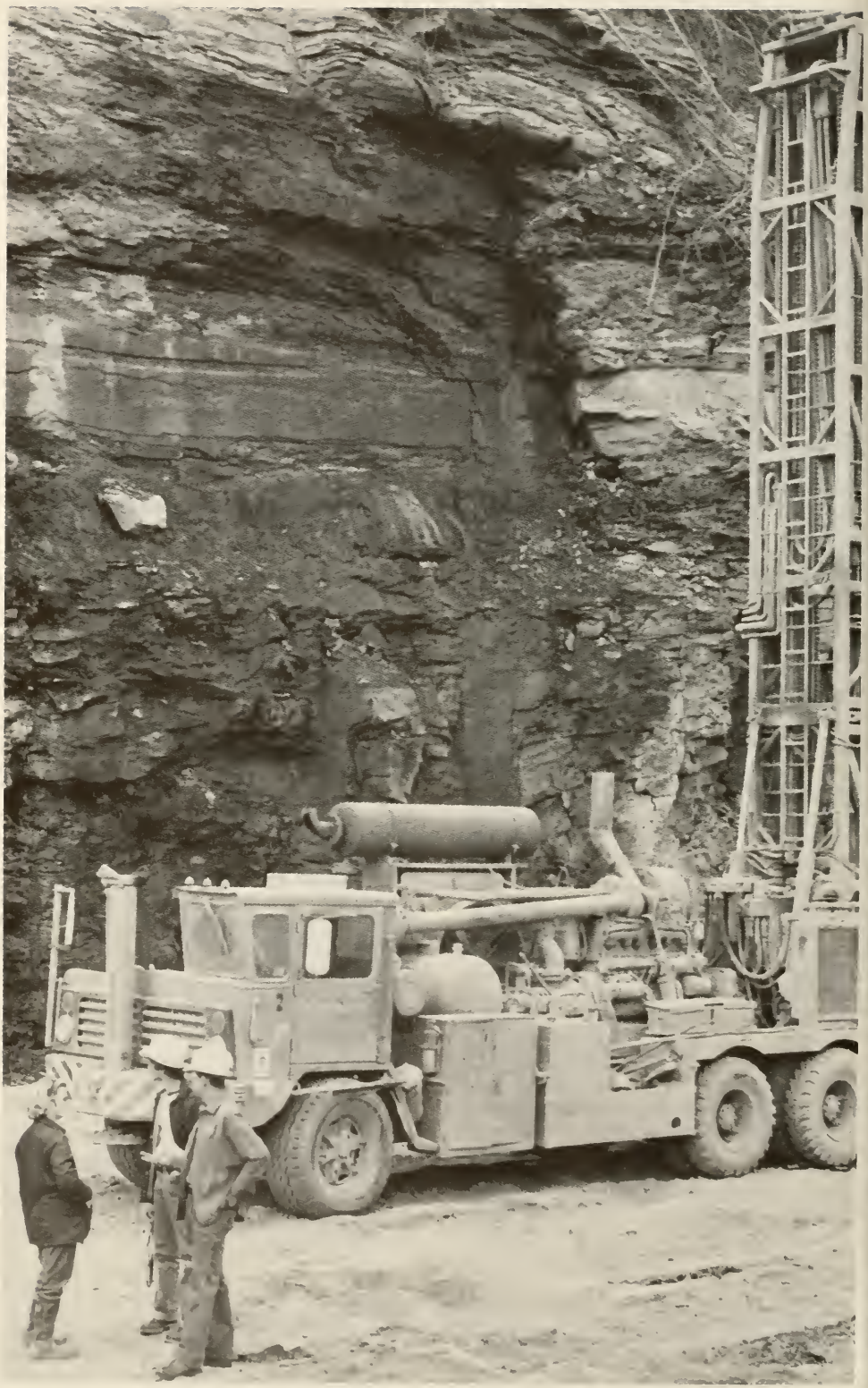
Students are admitted to Union College without regard to race, creed, age, sex, or physically handicapping condition. Although Eastern Kentucky and the general mid-Appalachian region constitute the primary service area of the college, it is intended that a balance will be maintained by enrolling applicants from across the nation and around the world.

Union College is committed to providing a faculty characterized by sound scholarship, stimulating teaching, exemplary character, and a deep concern for the needs of students. Classes are small, many teaching and learning options are provided, and opportunities for both professional and informal counseling and guidance are abundant.

Union College desires to provide a broad academic program to meet a wide variety of student and social needs and interests. The basic undergraduate liberal arts program of the college provides opportunities for preparation in the professions as well as general education in the humanities, arts, social studies, and sciences. Union College also has curricula at the certificate, associate degree, and graduate levels. These latter curricula are closely coordinated with regional manpower needs. Credit and non-credit continuing education offerings are available for persons seeking skills and/or desiring personal enrichment. Classes in all categories are offered on demand in various communities within the primary service area of the college in order to provide maximum convenience and minimum cost for students.

Union College affirms a special concern for improving the quality of life in Appalachia. The academic program provides undergraduate and graduate curricula in education that contain elements designed to address the unique needs of the public schools in the region. Appalachian regional studies make available to all interested students a basis for understanding the history and distinctive features of the region. The college's community service programs provide both on-campus and off-campus instruction in a variety of subjects for the educationally disadvantaged at the pre-college level as well as non-credit continuing education classes for the community at large.

In order to further the development of a free society of responsible individuals, Union College is committed to student involvement in institutional governance as an aid to the development of responsibility and leadership capabilities. Through student outreach programs a philosophy of life is encouraged that has a significant place for using one's time, talents, and resources in voluntary service activities.



SPECIAL INFORMATION

SPECIAL INFORMATION

While retaining many traditional values in liberal arts and pre-professional programs, Union College also strives to be unique and innovative in its approach to college education. Special programs offer non-traditional approaches to the earning of credit, ways of tailoring the student's education to his or her particular needs and interests, and experiences and training in areas not ordinarily found in a small college.

CAREER PLANNING, ACADEMIC ADVISING, AND PLACEMENT SERVICES

Upon admission to Union College, students will begin a process whereby career planners and faculty advisors assist them to articulate their career goals, to select academic courses of study appropriate to those goals, and to achieve suitable placement upon completion of their studies. A student should therefore be assured of a smooth transition from high school to the academic environment of Union College with the appropriate services available throughout the student's college days and afterwards.

Experiential Education

Certain types of off-campus, work-learning activities are an integral part of various curricula at Union College. These include cooperative education, field work with social and governmental agencies, and independent research. These activities are all exercised under faculty control and supervision during the regular school term and are evaluated in terms of credit toward degree requirements.

These programs are open to Union College students with sophomore or higher rank who are not on probation.

Arrangements for off-campus work-learning experiences must be initiated by the student in conjunction with his/her advisor.

Union College's Experiential Education program is approved for the training of veterans and other eligible persons under the provision of Title 38, chapters 34, 35, and 36, U.S. Code.

Credit for Prior Learning

A program to evaluate and possibly award credit for prior learning experience is available to those whose non-formal education may be of value in their quest for a college degree. Up to 60 semester hours of credit may be awarded toward a bachelor's degree, and up to 30 credit hours may be awarded toward an associate degree. These limits include credits gained through CLEP examinations, challenge examinations, military experience, and the portfolio development class.

Career Ladder Concept

Several of the Union College programs are designed so that the student may interrupt his education after two years of college to enter the world of work, and then return, without penalty, for a Bachelor's degree at some later date. Two-year (Associate Degree) programs are available in accounting, business administration, coal mining technology, computer information systems, office administration, medical secretarial administration, science education, vocational education, and elementary education.

Tutoring Center

The Tutoring Center offers tutoring to students in most freshmen and sophomore level courses. Tutoring is done by trained peer tutors, selected through faculty recommendation, superior academic achievement and personal interviews. Students should request help as soon as they experience difficulty in a class. There is no fee for the tutoring services.

Cooperative Nursing Program

A cooperative arrangement between Union College and Bellarmine College will provide registered nurses from the eastern Kentucky area an opportunity to pursue a bachelor's degree in nursing at Union College. Selected liberal arts and elective courses will be taught by Union College faculty; professional nursing courses will be taught by Bellarmine College faculty on the Union College campus. Clinical experiences will also be offered in the area.

The B.S.N. Degree will be conferred by Bellarmine College. This program will offer

the registered nurse an opportunity to receive a B.S.N. without leaving eastern Kentucky. Estimated completion time for the program is four years on a part-time basis.

Interested persons should file Union College and Bellarmine applications. An official transcript and a copy of the RN license should accompany the application to Bellarmine. Students must meet the general standards of both Colleges. Further information is available in the Office of Academic Affairs. See page 84 for course requirements, etc.

Oak Ridge Seminars

Since 1968, a series of special honors seminars has been conducted at the Oak Ridge (Tenn.) Institute of Nuclear Studies for selected majors in biology, chemistry, physics, and social sciences. These students, under the direction of the Oak Ridge Institute's professional staff, conduct experiments with specialized equipment in the realm of nuclear studies. Arrangements are planned that will provide summer employment at the Institute as research assistants for qualified students of the member colleges.

ADVANCED PLACEMENT

Students at Union College who have had superior preparation in certain curricular areas have regularly been placed in advanced course sections. In certain cases credit will be given by an examination administered by the Head of the Department. The College will also grant academic credit to those incoming freshmen who have successfully participated in the Advanced Placement Program of the College Entrance Examination Board. Interested students should consult the publication "Advanced Placement Program" of the College Board Advanced Placement Examinations, Box 592, Princeton, N.J., and their High School Guidance Counselors. Further information may be obtained from the Registrar or the Director of Admissions.

College-Level Examination Program (CLEP)

Union College is a regional testing center for the College-Level Examination Program (CLEP). The CLEP tests provide college credit for material students have mastered through self-study or non-accredited classes. There are five general exams and 30 subject area exams. As an Open Testing Center, Union College administers CLEP exams the second week of each month.

By passing the CLEP examinations, degree-seeking students enrolled at Union College can earn up to 30 semester hours of credit toward a four-year program; 15 hours may be earned toward a two-year program. High-school-special students, and other special students, are not eligible. Credit may not be earned, through CLEP, for courses required for teacher certification by the Kentucky Department of Education.

Exams in the general battery must be taken before the student achieves sophomore status.

Advanced Placement for Veterans

Academic credit is granted to veterans for advanced placement, in accordance with the standards of the American Council on Education. Up to 60 semester hours may be granted, on a combined basis, from College Level Examination Program (CLEP) tests, courses approved by the U.S. Armed Forces Institute, credit from service schools, and correspondence and extension courses. Veterans with over one year of active duty are automatically awarded eight semester hours of elective credit toward graduation.

NON-TRADITIONAL MAJORS AND MINORS

To meet the special needs of students who desire a non-traditional major or minor, several special programs have been devised. The degree of Associate of Applied Science in Education was designed to serve uncertified teachers in social service programs and Teacher Aides; the Christian Education major is designed to prepare unordained church workers such as Youth Education Directors; the combined major in Business and Music serves those who want to enter the business field while utilizing their skills in music as music store operators or owners; and the Environmental Studies minor serves the broad spectrum of students who have a special interest in ecology and the environment.

Students may elect to develop an Individualized Major not listed in the catalog. Regular general education requirements must be met, and the planned program is developed for a specific reason or goal of the student. The program cannot be used for a waiver of prescribed courses in existing major fields.

The major must be arranged at least one year prior to graduation from Union College and be approved by the appropriate Division Chairman, the Vice President for Academic Affairs, and the Academic Policy Committee.

ACADEMIC CALENDAR

Union College operates on a semester system. The Fall semester begins in early September and ends before Christmas. The Spring semester runs from January to early May. The college has a special three-week May interim session as well as two five-week summer terms.

APPALACHIAN STUDIES

Reflecting the College's primary mission of improving the quality of life of the Appalachian people, Union is developing a multi-faceted Appalachian Studies Program. One or more components of the program should be of interest to all students. The program seeks to develop an appreciation of the people, culture, and socio-economic conditions of the mountain area; to provide opportunities for direct service, research and personal experience in the region; to provide the skills and critical understanding needed to work in this area; and to help the student develop an understanding of himself and others.

The program at present consists of the Appalachian Semester and Environmental Studies, each outlined in detail below, and of various academic courses, identified in appropriate departmental and division course listings. The student will find here an interdisciplinary approach to the history, politics, music, natural resources, economics, and other aspects of the region, which will stand him in good stead no matter where he or she may live later.

Appalachian Semester

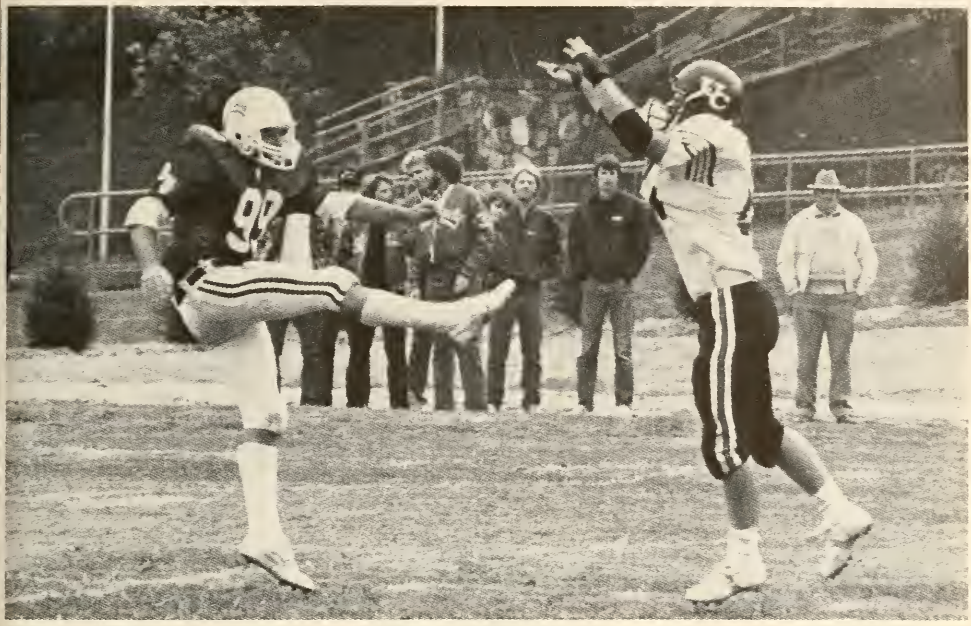
The Appalachian Semester, which is operated twice yearly, during the fall and spring terms, is a unique interdisciplinary academic program in which mature second-semester sophomore, junior, and senior students from Union College and other institutions throughout the United States devote their full time to studying the Appalachian region—its strengths, problems and challenges. Students earn a total of fifteen semester hours of academic credit. Nine hours of credit are offered in sociology at the upper division level, and six hours are offered at either the lower or upper division level for field work in a variety of disciplines. Field work may be either experiential learning of a regional nature in a local service agency or other institutional setting, or it may be directed study in the region at large. The program is designed to combine interdisciplinary classroom experiences and on-the-scene community experiences into a "living-learning" situation where total involvement of students and faculty may take place.

Opportunities are provided to discuss with local and regional leaders assets and problems of the region, and field trips are coordinated with seminar discussions in order to involve participants on the spot with current regional issues. Following an orientation of approximately four weeks, students leave the campus and learn through independent study or work in a variety of private and public service settings.

Course descriptions are included in the curriculum section of this catalog. Detailed information and application forms are available from the Coordinator, Appalachian Semester, Union College.

Environmental Studies

Union College conducts a variety of environmental programs for students, teachers, and other community leaders, focusing on the unique challenges of the Appalachian region as well as on questions of current national and global concern. The undergraduate program is supported by an Environmental Studies minor.



DEVELOPMENTAL STUDIES

The Developmental Studies Program is designed to help students become more successful in their college studies. Through this program Union College has recognized that each entering student has different strengths and weaknesses. **It is the sum total of these strengths and weaknesses that leads to either success or failure in college study.** Some of the common weaknesses are in reading, writing, and math skills, as well as in personal skills such as time management, goal setting, and decision making.

The College has developed mandatory courses for students who score

1. below 80% on the English Placement Test,
2. below 80% on the Math Placement Test,
3. below 11 on the Nelson-Denny Reading Test,
4. below 75 on the Coopersmith Self-Esteem Scale and above 9 on the Norwicki Strickland Locus of Control Scale.

Students with composite scores of below 20 on the ACT and 450 on the verbal and quantitative sections of the SAT are required to take these placement tests before being assigned an advisor and registering for classes.

Students who are not required to take the developmental courses listed below may elect to take one or more of them after consultation with their academic advisor.

The mandatory courses include the following four courses, each carrying 3 semester hours of credit:

1. **English 110** — Is designed to provide training in college-level language skills and to prepare students for English 111 and other introductory courses.
2. **Mathematics 100** — Is intended for students who need to improve their arithmetic and elementary algebra skills prior to taking other mathematics courses or courses requiring quantitative reasoning. The course includes a brief review of whole number arithmetic (particularly prime factorization, exponents, and perfect squares), and extensive review of fractions, decimals, ratio and proportion, percent, and an introduction to algebra (including arithmetic of integers, algebraic expressions, and linear equations).
3. **General Studies 101** — Is designed to help students increase their reading levels to more effectively handle the reading loads required in college. The student's reading level will be evaluated thoroughly to determine the entry level.
4. **General Studies 102** — Is designed to increase students' academic and personal confidence through two components. The first will aid students to improve their study and time-management abilities. The second will present decision-making skills that will enable students to clarify their goals, values, and interests, allowing them to make effective decisions throughout their life.

Graduate Program in Education

Union College offers a unique graduate program designed for in-service teachers in the public schools. The College grants the 5th year certificate for Kentucky teachers, the M.A. degree in Education with emphasis as a reading specialist, in elementary education, general secondary education, health, kindergarten education, English, social science, and natural science. Work beyond the Masters level leading to certification as an elementary or secondary school principal is available. Many courses are offered off-campus.

Qualified holders of the Bachelor's degree should contact the Dean of Graduate Academic Affairs for brochures, catalogs, and information about the graduate program.

ADMISSIONS AND GENERAL INFORMATION

ADMISSIONS

The policy of Union College is to admit as regular students only those persons who have either a high-school diploma from an accredited high-school or a high-school equivalency certificate based on the General Educational Development (GED) tests. The admission of a student is determined after a careful review of the student's record. Factors entering into the decision are high-school grades, scores on the ACT or SAT, and letters of recommendation.

The high-school transcript should include 3 units of English, 2 of Mathematics, 2 of Social Studies, and 2 of Science. Foreign language is recommended.

Applicants who have previously attended college are required to have their college transcripts sent to Union. All college work will be taken into account when an admissions decision is made.

Generally, the College will decide on the admission of a student within one week of the receipt of all pertinent material: high-school and/or college transcripts, ACT or SAT scores, and letters of recommendation.

Procedure For Admission

Application for Admission

The application form may be obtained from the Admissions Office, Union College, Barbourville, KY 40906. When submitted, this form must be accompanied by a non-refundable fee of $15.00.

Secondary School Transcript

Each applicant must authorize the release of his or her transcript by signing in the appropriate place on the application form. The Admissions Office will then write to the applicant's high-school counselor for the official copy of the transcript.

GED Acceptance

An applicant, not less than 18 years of age, may be admitted on a high-school equivalency certificate based on the General Education Development Tests, provided that the scores earned are equal to or above the minimum recommended for college entrance by the American Council on Education.

Entrance Tests

All candidates (except students transfe ring at least 30 hours of credit or student who are 25 years of age or older) are re quired to take the American College Tes (ACT) or the Scholastic Aptitude Test (SA and are expected to have the results fo warded to Union College. The Union Colleg institution number is 1552 for the ACT an 1825 for the SAT.

The application blank for the test an bulletin of information may be receive from the secondary-school guidance office

Recommendations

Two recommendations will be obtaine by the Admissions Office from the person named by the applicant on the applicatio form. The applicant must give the full nam and address of (1) the applicant's coun selor, teacher or other officer of the school and (2) a teacher, pastor, rabbi, etc.

Health Certificate

The required physical examination form is mailed by the Admissions Office and should be returned as directed.

Personal Interview

An interview is recommended. The Admissions Office at the College is oper from 8 a.m. until 4:15 p.m. Monday through Friday, and by appointment from 9 a.m. until 1 p.m. on Saturday during the academic year. If distance is a factor, an interview can be arranged with an alumnus of the College living in the applicant's area.

Admission of Foreign Students

Foreign students must complete the regular admission process (ACT or SAT is not required of foreign students). After the student is accepted, the College must receive payment for the student's first semester costs for tuition, room and board, and fees. This payment must be received at least one month before the beginning of the semester. Once the payment has been received, the I-20 form will be issued.

In order to be considered for admission, a foreign student must show English proficiency with a minimum score of 500 on the Test of English as a Foreign Language (TOEFL), 107 on the ELS English Proficienty, or 70 on the Michigan English Placement Test.

When the admission process is completed, a foreign student is obligated to stay at Union for at least one year. No official transcript or recommendation will be released until the student fulfills the year's obligation. If a student leaves before one year, he must be reported to the Immigration and Naturalization Service. One year is interpreted as two full semesters, excluding summer sessions.

The student must pursue a full course of study. Those who drop to part-time status must by law be reported to the Immigration and Naturalization Service. No visas and/or passports will be renewed until the student's account is paid in full.

Transfer and Advanced Standing

Credits earned from an accredited community college, junior college, senior college, or university can be transferred to Union College, but sixty-seven semester hours is the maximum amount of junior college or community college credit which may be counted toward a degree.

Transfer credits will be accepted at the level of the initiating institution. In case of an appeal for upper division credit when the course was taken at a junior college or as lower division work at a senior college, a committee consisting of the Registrar, the division chairman of the area involving the course, and an appointed faculty member from that discipline will review the content, text, level of work, etc., to determine if upper division credit should be granted.

Union College will record a summary of transfer credits, indicating the total number of hours accepted and the quality point average at the sending institution. Union accepts only transfer work in courses with a grade of "C" or above. This policy applies only to credits transferred on a course-by-course basis, not to junior college students who transfer entire degree programs.

The student's grade point average will be calculated solely on the basis of grades earned at Union College.

Advanced Placement

Students who have successfully passed one or more of the Advanced Placement Tests of the College Entrance Examination board may ask for advanced placement and credit when they submit their scores for application. The Vice President for Academic Affairs will decide on the amount of credit to be granted and the college course that may be omitted. Scores of 3, 4, or 5 are required for such action.

Classification of students

Freshman	less than 32 semester hours
Sophomore	32 semester hours
Junior	64 semester hours
Senior	96 semester hours

Summer Orientation

A one-day Summer Orientation program is required for all students, including traditional freshman, returning adults, commuters, and transfer students who are entering Union College for the first time.

The program includes placement testing, academic advising, advance registration, and financial counseling and is designed to help students make a successful transition to college.

Early Start Summer Program

A high-school graduate who has not attended college since graduation may be eligible for the Early Start Summer Program. The student must have been in the upper 50% of his or her class and must have an ACT English score of at least 16 (SAT Verbal of 410).

This student must enroll for 6 semester hours at Union each summer session preceding fall entry. Union College will provide a scholarship for one-half of the tuition charges. If the student lives on campus, there will be no summer room charge, except for the $50 refundable room deposit.

If the student's summer grades average 3.0 ("B" average), the student will receive a $250 scholarship as a full-time student in the fall. If the 3.0 average is maintained in the fall, the student will receive another $250 scholarship in the spring. After the spring semester, the scholarship terminates.

High-School-Special Program

A student who has completed the junior year of high school may qualify for the High-School-Special Program. The student must have a "B" average and must pass all sections of a Placement Test given by the College in order to be admitted to the program. The student may then enroll for 6 hours or less in any one term for one-half the established summer rate. This scholarship terminates when the student graduates from high school.

COLLEGE EXPENSES

The academic year of nine months is divided into two semesters and a May Interim term. The rates quoted below are for one semester. The cost of a regular session of nine months can be found by multiplying a semester's expenses by two. All checks should be made payable to Union College.

Undergraduate Expenses (per semester)

Tuition (10 to 17 semester hours) $1,950.00
Room* 265.00
Private Room* 345.00
Board (19-meal week)** 700.00
Full Time Students
Activity Fee 25.00
Total for Boarding Student 2,940.00
Total for Non-Boarding Student 1,975.00
Part-time tuition for all registration under ten or above seventeen semester hours, per semester hour 80.00
(Undergraduate students over age of 50 pay 50% of the established tuition rate.)

Graduate Expenses

Full-time tuition (10 to 17 semester hours $1,950.00
Part-time tuition, per semester hour 80.00
Activity ID card (required for boarding graduate students) ... 25.00
For further information see the Graduate Catalog.

Summer Session Expenses

Tuition, Undergraduate, per semester hour $80.00
Tuition, Graduate, per semester hour 80.00
Tuition, High-School-Special, per semester hour 40.00
Room, each term (double occupancy) 80.00
Private Room, each term 105.00
Board (19-meal week) each term (5 weeks)** 225.00
Board (Sunday dinner through Friday lunch—15-meal week) each term** 180.00

May Interim Term Expenses

Tuition, Undergraduate, per semester hour ..... $80.0(
Tuition, Graduate, per semester hour ..... 80.0(
Room (double occupancy) ..... 50.0(
Private Room ..... 65.0(
Board (19-meal week)** ..... 135.0(

Other Expenses

The fees listed below are not a part of the traditional tuition and board and room charges.

Application Fee ..... $15.0(
Audit Fee, per semester hour 15.00
Late registration fee*** 15.00
CLEP—Advanced Tests only (per test) 28.00
CLEP Credit Recording fee ..... 25.00 (per course equivalent)
College Court Rental, per month (all utilities furnished) 140.00
Examination:
late examination fee 1.00
late final examination fee 5.00
credit by examination (per credit hour) 20.00
Foreign Student Admission Deposit 200.00
Graduation fee for Assoc. Degree or Diploma 25.00
Graduation fee for Bachelor's degree 30.00
Graduation *in absentia* fee 25.00
Music lessons: part-time and special students, per credit hr. . 80.00
Transcript—after first copy (one week's notice required) 3.00
Student Teaching Fee 100.00

*Vacation periods are not included in the above quotations. Dormitories and food service are closed during vacations and other periods as noted in the undergraduate calendar. The College reserves the right to entertain delegates to conventions and other related groups in the residence halls during vacation periods. Students will be notified in advance of such contemplated occasions and assurance given regarding the safeguarding of their personal property during such occupancy. Each dormitory resident must also be a boarding student and purchase a meal ticket for the college cafeteria.

**All board charges are subject to change without notice, pending contract agreement with the food service.

***Late registration fee can be waived by the Registrar for sufficient reason if permission is requested in advance.

Payment Policy

I. Financial Clearance

A student will be cleared for registration only if any previous balance has been paid. The new semester's account must then be paid in full, or a signed payment plan and first installment completed. Summer school and short sessions must be paid in full at the date of registration—no payment plan is permitted for summer or short sessions.

Authorized financial aid will be credited to the student's account except for work-study aid, which can only be credited as it is earned. In case the financial aid is anticipated but not yet authorized, the student must pay as a first installment one third of the **total** costs.

A student having any unpaid balance will not be cleared for the release of an official report of grades, a transcript of credits, or a diploma.

II. Finance Charge

A monthly finance charge of one and a half percent (18% annual rate) will be added to any unpaid balance of a student's account.

III. Payment Plan

If the new semester's account cannot be paid before registration, a payment plan signed by a dependent student and a parent (or by an independent student and spouse or cosigner) can be completed and a first installment paid down. The payment plan requires one-third payment on each of the following dates after which the student will be withdrawn from courses if the account is not paid up:

1. On or before fall semester or spring semester registration — one-third.
2. Due October 5th (fall semester) or February 5th (spring semester) — one-third + 1½%.
3. Due November 5th (fall semester) or March 5th (spring semester) — one-third + 1½%.

Students who owe a balance on their account after November 15th (fall) or March 15th (spring) may be subject to withdrawal procedures.

Refund Information

Since faculty contracts and other commitments are made by the College for the entire year in advance, the following refund schedule has been established in order that the College and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his or her program.

1. A student is considered to be enrolled until he or she completes drop/withdrawal procedures. These procedures must be completed in person or by mail. Necessary forms must be obtained from the Office of the Registrar. All refunds will be based on the date these drop/withdrawal forms are completed and returned to the Office of the Registrar.
2. A full refund may be obtained for a class only if a student has never attended that class.
3. Any portion of board charges unused up to date of withdrawal will be refunded, except that a full week's board will be charged for any fraction of a week.
4. Tuition and room charges will be refunded on the following basis:

   Regular Semester—Twenty percent of the total for tuition and room will be charged the first week, 40% the second week, 60% the third week, 80% the fourth week. No refund will be given after the fourth week. Any part of a week will be treated as a full week. Refund is based on tuition charges less $10 student center allocation, $1 class dues, $1 student senate fee, and $3 for I.D. card.

   Summer and Short Terms—Withdrawal up to the end of the first week will permit a 50 percent refund. No refund will be made after the end of the first week. Any part of a week will be treated as a full week.
5. **Refund of Overpayment on Student Account**—If a student makes an overpayment on his or her account, a written request for refund must be submitted to the Business Office within one year after the end of the last academic term for which the student was enrolled.

6. **Room Reservation Deposit**—This deposit will be refunded if the request is made in writing not later than August 1 for the fall semester or 30 days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request to the Dean of Students at least 30 days before the end of the term, for cancellation of the contract. This deposit will be refunded within 60 days upon receipt of written authorization by the Dean of Students indicating that the depositor is no longer enrolle as a student at Union College and tha he or she has left the housing facility un damaged and does not owe other bills. The request for this authorization mus be made within one year after the end o the academic term for which the studer was enrolled.
7. Questions regarding refunds may be ad dressed to the Dean of Students or ap pealed to the Vice President for Studer Affairs.

FINANCIAL ASSISTANCE

Student expenses. In planning to attend Union College a student should expect the following typical expenses for an academic year: tuition and general fees $3,950, room $530, board $1,400, books and supplies $250. In addition, allowance should be added to these figures for personal expenses, medical insurance, transportation, and extra charges for special courses (such as laboratory fees, etc.). The Office of Student Financial Aid will consider the total costs for attendance, including the items listed above, when making a financial aid commitment.

Purpose of financial aid program. In addition to its own scholarship funds, Union College participates in all federal programs including the Pell Grant Program. Residents of Kentucky are also eligible to receive state tuition grants and loans. Information on Union College scholarships will be found on the following pages.

Students applying for financial aid are considered for all programs for which they are eligible. The amount of financial aid awarded is generally a combination of grant, loan, and employment, and is based on the financial need of the student. Need is determined by subtracting the resources of the student and the contribution of his or her parents from the total student expenses. The parents' contribution is estimated on the basis of the amount of their income and assets as well as a consideration of taxes, medical expenses, and other liabilities of the family. An independent, objective, nationally recognized method of analysis developed by the College Scholarship Service is used to evaluate the family's financial circumstances. All financial aid awards to students are deter mined by Union College's Office of Studen Financial Aid.

Procedures for applying for financial aid. Students must apply for financial aid b submitting a Financial Aid Form (FAF) t the College Scholarship Service. Student applying by March 15 will have a greater op portunity. However, financial aid will still be available after this date. The FAF is used t apply for the Pell Grant, the Kentucky Tui tion Grant, the Supplemental Educationa Opportunity Grant (SEOG), College Work Study, National Direct Student Loan (NDSL and any institutional funds. The FAF may be obtained from a high-school guidance office or the office of Student Financial Aid Students should specify 1825 as the code number for Union College in the appropriate section of the FAF.

A Financial Aid Notification along with information about any aid offered will be sent from Union College to each student who applies.

Procedures for reapplying for financial aid. A student must reapply for financial aid each academic year. However, aid usually continues at the same level each year, unless a student's resources or the expected contribution of his or her parents change. All enrolled students receiving aid automatically receive information about applying for renewal awards. Other enrolled students should request applications by February 15.

In order to continue to receive financial aid, a student must be making satisfactory progress toward his or her degree. A student may be said to be making satisfactory

rogress during the first semester on cademic probation. However, he or she is ot considered to be making satisfactory rogress should he or she continue on cademic probation for a second conse- utive semester, or fail to complete 50% of he courses for which he or she enrolls in ny one semester. The maximum number of emesters for which financial aid may be eceived is ten.

rants

Pell Grant—A program providing direct rants from the federal government. The tudent receives an eligibility report (as a esult of his or her Financial Aid Form appli- ation) which can be submitted to Union ollege for payment. It is expected that the naximum amount for the Pell Grant for 984-85 will be $1900.

Supplementary Educational Opportunity rant (SEOG)—A program designed by the ederal government to assist students with xceptional financial need. The grant is per- nitted in a range from $200 to $2000 per ear for students who demonstrate aca- demic potential.

Kentucky Tuition Grants—The program rovides grants to students who are resi- dents of the Commonwealth of Kentucky nd who demonstrate a need through the nalysis of the Financial Aid Form appli- cation.

mployment

College Work-Study Program—If a stu- dent still requires financial support to meet ollege costs after the federal and state rants are awarded, the student will be warded an amount to be earned on an ourly basis in a campus department. This mployment program is campus-based sup- ort from the federal government. Either ndergraduates or graduate students can ualify if the Financial Aid Form results ndicate a need.

Work-Grant—If a student cannot qualify or employment on the basis of financial need and the College needs the special skills of the student, the student can work for an amount of tuition waiver.

Loans

National Direct Student Loan—Federal loan funds are made available to students who have financial need and who maintain satisfactory progress toward graduation. A Congressional change in the regulations on July 1, 1981, requires that repayment at a 5% interest rate begin six months after graduation or withdrawal from school.

KHEAA Guaranteed Student Loan Program—This loan program exists in Kentucky and other states as a way to borrow from private commercial lenders to finance college education on the undergraduate and graduate levels. Repayment at 9% interest begins 6 months after graduation or withdrawal. Minimum payments are $50.00 a month. Eligibility depends upon at least half-time enrollment status, a "C" average for undergraduate students, and a reporting of family income. The loans are insured by the state.

United Methodist Student Loan Fund—Students who are members of the United Methodist Church and maintain a "C" average may apply through Union College for a loan at 6% interest from the Board of Education of the United Methodist Church.

Charles M. and Mary D. Grant Loan Fund—The Charles M. and Mary D. Grant Foundation has provided an endowment loan fund for Appalachian students who demonstrate a real need and who are in good standing at the College.

Hensley Emergency Loan Fund—Mr. and Mrs. Burton F. Hensley have established a loan fund for single students at Union College who have emergency situations requiring small short-term loans.

The Rev. and Mrs. Erwin King Loan Fund—The Rev. and Mrs. Erwin King have established a loan fund to aid worthy ministerial students in the junior or senior year at Union College.

Guy H. Williams Loan Fund—Dr. Guy H. Williams, of Cleveland, Ohio, has established a loan fund in memory of his wife, Anna Williams. The fund is available to worthy students who have spent two years at Union College and have a "C" average or better.

Knox County Chamber of Commerce Student Loan Fund—Mr. William S. Murphy, former director of development at Union College, provided the initial gift to establish

the fund as an expression of appreciation for the contribution of Union College to the educational, economic, social, and religious life of Knox County and vicinity. The Knox County Chamber of Commerce attempts to make annual contributions to this fund, and encourages local citizens to do likewise.

The Charles Henry and Glennora Rominger Krieger Student Loan Fund—This loan fund, established by the late Glennora R. Krieger, of Ft. Thomas, Kentucky, provides loans to worthy and needy students from the Appalachian counties of Eastern Kentucky. The terms of the loan are the same as those of The United Methodist Student Loan Fund.

Other Loan Funds—Student loans are available from a number of funds not specifically designated for Union College students, but for which Union College students are eligible. Specific information may be obtained from the Office of Financial Aid.

Loan-Grants

Ministerial Loan-Grant—Ministerial loan-grants amounting to $400 for the academic year are available to students studying for the ministry. To be eligible for this aid the student must have a license to preach, or must enroll in the non-credit religion course, Conference Studies, which is designed to prepare candidates for obtaining the license to preach. Renewal of the loan-grant depends on the student's successfully passing this course and obtaining the license to preach before the beginning of the next academic year. Applicants qualified for the loan-grant must sign a note for the amount received each semester. These notes will be cancelled after the individual has entered the full-time ministry. If the student changes his plans and enters another field of endeavor, the notes become due and payable.

Loan-grants amounting to $700 for the academic year are available to United Methodist local preachers who agree to serve four years in the Kentucky or Louisville Annual Conference. These notes will be cancelled after the specified service has been fulfilled.

United Methodist Church Grants-in-Aid—Union College will provide grants of $400 for full-time United Methodist students and will request the student's home church to match the grant. If the stude plans to go into the Methodist ministry or the student is a dependent of a Methodi minister, then a $500 grant will be provid by the College. In each case, a request w be made to the local church to match t grant.

The grants are for one year, renewabl and may be applied to any Union Colleg charges (tuition, fees, room and board c campus). A student is eligible for only or of the above grants.

College Employee Scholarships—Fu time employees of Union College are eli ble for tuition remission scholarships. The spouses and/or unmarried dependent ch dren may receive one-half tuition schola ships. A tuition grant at other colleges pa ticipating in the Tuition Exchange Prograi is also available to employees' unmarrie dependent children.

Full-time employees hired after Januar 1, 1975, will not be eligible for tuitio scholarships for spouse or children unt they have been employed for six months ur less they are under annual contract. Deper dent children are not given employe scholarships for graduate work. Eligibl persons must apply at the Business Offic at least one week prior to registration.

Assistantships

Senior Assistantships are made availabl annually in the academic divisions. The as sistantships are open to students of out standing scholastic ability who exhibi great promise of future usefulness and wh are considering graduate studies with a view to entering college teaching. The duties of the Senior Assistants include oc casional classroom lectures, research, re medial work with beginning students, assis ting in laboratories, etc. The Assistants are expected to spend a minimum of twelve hours per week on the work assigned. The awards are made by the Scholarship Com mittee upon recommendation from the divi sion chairmen. Senior Assistants receive a stipend of $600 per year.

Scholarships

A full-time student who qualifies for scholarship assistance on a merit basis may be entitled to more than one of the following scholarships in any one academic

ar. The total amount of scholarship and ier financial aid cannot exceed 100% of annual college costs.

Valedictorians and Salutatorians are arded $2,500 and $2,000 respectively. udents in the top 10% of their graduating ss are awarded $500. Evidence of high- hool rank must accompany the tran- ipt, certified by the high school attend- These scholarships are renewable every ar of the student's undergraduate pro- am at the original amount, if a minimum mulative grade point average of 3.5 is intained, or at two-thirds of the original ount for a 3.0 minimum average.

Academic Scholarships based on T/SAT scores are available as shown in chart below. These scholarships are ewable for succeeding years at the ginal amount if the student maintains a nimum cumulative grade point average 3.5, or at two-thirds of the original ount for a 3.0 minimum average.

ACADEMIC SCHOLARSHIP CHART

CT Scores	SAT Scores	Award
20	900	$600
21	950	$700
22	1000	$800
23	1050	$900
24	1100	$1,000
25	1150	$1,200
26	1200	$1,400
27	1250	$1,600
28	1300	$1,800
9 and up	1350 and up	$2,000

Junior College Scholarships in the mount of $500 are awarded to graduates junior or senior colleges who have earn- the A.A. or A.S. degree with a grade point verage (GPA) of at least 2.5 on a 4.0 scale. hese scholarships are renewable in the enior year at $500 if the student maintains is average, or increase to $600 if the stu- ent increases his grade point average to 0.

Alumni Scholarships—The Alumni ssociation of Union College awards four cholarships annually on the basis of haracter, need, and evidence of future sefulness. Each scholarship is for $500. ecipients are selected by the Alumni cholarship Committee.

The George L. Bagby Scholarship/Loan Fund—The late Mr. George L. Bagby, of Woodford County, Kentucky, established a student financial aid endowment totaling $405,000 including accumulated interest, and this supports both scholarships and loans for Kentucky students.

Bank of Harlan Scholarships—A number of scholarships are given annually to qualified students from Harlan County by the Bank of Harlan. The grants are determined according to financial need and academic excellence.

Barbourville Kiwanis Scholarship—The Kiwanis Club of Barbourville, Kentucky, has supplemented an educational fund originated by Mr. C.F. Hedrick and established a scholarship fund at Union College for promising students from Knox County, Kentucky.

Barbourville United Methodist Church Music Scholarships—Annually the First United Methodist Church of Barbourville, Kentucky, awards four scholarships of $200 (for a total of $800) to music students. Consideration is given for participation in the music program of the local church.

Bell County Scholarship—A friend of Union College from Bell County, Kentucky, has established a scholarship endowment with the income to be awarded annually to a Bell County student. This grant may vary with the income from the investment but will be approximately $300 per semester.

Henry C. Black Memorial Scholarship—This scholarship of $250 is given as a memorial to Mr. Henry C. Black, a graduate of Union College, to a freshman graduating from a high school in Kentucky or Tennessee.

John A. and Hannah P. Black Memorial Scholarships for Christian Workers—The late Dr. and Mrs. Henry C. Black, of Johnson City, Tennessee, endowed a scholarship that provides an annual grant of $500 for a promising student who plans a life of service in The United Methodist Church.

Dr. and Mrs. James F. Blair Scholarship—Dr. and Mrs. James F. Blair, of Barbourville, Kentucky, have endowed two $300 scholarships for students from Knox County, Kentucky. They are awarded annually to students in the sophomore, junior or senior year.

The Daniel Boone Festival Cherokee Scholarship—The Daniel Boone Festival of Barbourville has established an annual $500 scholarship to a Cherokee student from the Qualla Reservation, Cherokee, N.C.

The Eulalia Serrano Cabrero Memorial Scholarship—Miss Carmen Cabrero, '64, Jacksonville, Florida, has established a scholarship in memory of Eulalia Serrano Cabrero, a 1964 graduate of Union College. The scholarship will pay $300 per year, and is made available to a needy student of minority background interested in a service profession.

W.S. and Bess Carpenter Scholarship—Mr. and Mrs. W.S. Carpenter, of London, Kentucky, provide annually a scholarship for a worthy freshman, preferably from Southeastern Kentucky. The grant varies with need, but is in the $500-$700 range.

Dr. and Mrs. Carlo B. Cawood Memorial Scholarship—The late Dr. and Mrs. Carlo B. Cawood, of Harlan, Kentucky, endowed a scholarship to be awarded to a Harlan County student, with preference being given to a student from the Harlan United Methodist Church. The scholarship may be renewed. The grant is $700 per year.

Mamie D. Chambers Endowment Fund—The late Mamie D. Chambers, of Maysville, Kentucky, established an endowment fund, the income from which is used to help support grants to needy and deserving students.

The Davies Memorial Scholarship—The family and friends of Miss Ellen Davies and Dr. T.R. Davies have endowed an $800 scholarship to be awarded annually to a freshman or to an upperclassman with a "B" standing from Bell, Clay, Harlan, Knox, Laurel or Whitley County.

Dr. Robert M. Drew Endowment Fund—The Commission of Missions of the Hyde Park Community United Methodist Church, Cincinnati, has established an endowment fund in honor of the Rev. Dr. Robert E. Drew. This fund will be used for scholarship grants to foreign students.

Dr. Franklin Duncombe Memorial Fund—Mrs. Helen Duncombe, of Haverford, Pennsylvania, has established an endowment fund in memory of her late husband. Income will be used to finance grants-in-aid for students planning to enter the United Methodist ministry.

Alfred I. DuPont Scholarship Fund—Tl late Mrs. Alfred I. DuPont, of Wilmingto Delaware, established scholarships f needy students having high academ potential. Preference is given to studen from the Appalachian counties of Kentucl and Appalachian regions in adjoinir states.

E. Nettie Edinger Memorial Schola ship—The late Mr. Joseph Edinger endov ed this scholarship in memory of his siste The scholarship is awarded annually to deserving and worthy student enrolled Union College.

Dr. and Mrs. J. Edward Faulkn Memorial Scholarship—This $350 schola ship is awarded to a student who plans life of service in the healing arts, wit preference being given to a pre-dental st dent.

The GAR Foundation Endowed Schola ships—The GAR Foundation has endowe scholarships for Appalachian students wit priority being given to those from the Fift Congressional District.

W. Glover Giles Memorial Fund—The late Mr. W. Glover Giles, of Louisville, Kentucky a trustee of Union College, established ar endowment fund by gifts during his lifetime and by a bequest. Income is used to func Honor Scholarships at Union College.

John O. and Harriet B. Gross Memoria Scholarship—Family and friends have en dowed a scholarship. Dr. Gross was presi dent of Union College during the years 1929-1938. The scholarship is awarded an nually to a Kentucky senior student with preference being given to one from North ern Kentucky. The stipend and re quirements are the same as for "United Methodist Scholarships."

Hugh and Joyce Haggard Memorial Scholarship—A scholarship fund memorializing Dr. Hugh E. and Joyce A. Haggard, and their children, Walter M. and Stephanie L., has been established by the parents and brother of Dr. Hugh E. Haggard. Income from the fund provides an annual scholarship for a full-time student at Union College. The $500 scholarship will be awarded to a worthy student on the basis of financial need.

Dewey and Rachel B. Hendrix Memorial Endowment—Dwight M. Hendrix, an alumnus of Union College, and his sister, Mrs. Mary Katherine Hendrix Brashear, of

len, Leslie County, Kentucky, have ablished an endowment to memorialize parents. The endowment is designated financial aid, with the income to assist dy and qualified students enrolled full- e. Students who are residents of Leslie nty, Kentucky, are given preference. uld no one qualify, then the grants are be given to students from the Ap- achian Region of Kentucky.

Walter S. and Ida Cole Hudson Scholarship Fund—The late Ida Cole Hudson, of Barbourville, an alumna of Union College, owed, through a bequest, a fund to pro- e scholarships to students from Knox nty, Kentucky.

Irene Hughes Scholarship—Miss Irene hes (AB '37; MA '63), Barbourville, Ken- ky, provides an annual scholarship of 0 for a freshman girl, a graduate of Knox tral High School, who has been a mber of the High School Honors English ss and who exemplifies Christian prin- les of conduct. The scholarship will be arded by the Alumni Scholarship Com- tee.

Professor and Mrs. Millard L. Jordan Scholarship—Professor and Mrs. Millard L. dan of Lakewood, Ohio, have establish- a scholarship fund at Union College to worthy Appalachian students.

Junior Study Club Scholarship—The ior Study Club of Barbourville, Ken- ky, provides a $200 scholarship to aid thy students from Knox County, Ken- ky. The scholarship is awarded to a girl o graduated from a high school in Knox unty and who is a junior or senior at on College.

Kentucky River Coal Corporation Scholarship—A scholarship endowment s been established by the Kentucky River al Corporation, Lexington, Kentucky, for dy students from Knott, Leslie, Letcher, d Perry Counties, Kentucky. Recipients st have a grade point average of at least during their senior year in high school, must have or maintain a grade point rage of at least 2.5 at Union College.

Jeffrey W. Kronk Memorial Scholarship—Mr. and Mrs. Walter F. Kronk, of ntsburg, Ohio, have endowed a scholar- p for a needy, qualified student for auga, Lake, or Ashtabula counties in o, or from the Appalachian counties of utheastern Kentucky. The scholarship is in memory of their son, Jeffrey, who was enrolled at Union College from 1963 through 1967. Should there be no qualified students from these areas in any given year, the endowment income will be used to support the Lincoln-Civil War Collection at Union College.

Verna Noe Landrum Memorial Scholarship—Mr. John W. Landrum, of Harrodsburg, Kentucky, has established a $500 annual scholarship at Union College in memory of his mother, Mrs. Verna Noe Landrum. The award is to go to a student from Harlan County.

W.B. Landrum Memorial Scholarship—Mr. John W. Landrum, of Harrodsburg, Kentucky, provides annually a scholarship of $500 in memory of his father for a promising United Methodist ministerial student. The student benefited by this scholarship must exhibit outstanding personal attitudes of religious sincerity, devotion, and earnestness in purpose.

London Laundry Scholarship—The London Laundry & Dry Cleaners, London, Kentucky, has established an annual $300 scholarship to assist, during his freshman year at Union College, a student who has graduated from a high school in Southeastern Kentucky.

Dorothy Lucas Memorial Fund—An endowment fund has been established in memory of Miss Dorothy Lucas, Registrar of Union College for many years and beloved friend of students. The income from the fund is used to support various student-aid activities of the College.

The Magee Christian Education Foundation awards annually a scholarship for students entering Christian vocations or professions or to those of economic need who are of Christian commitment.

Gayle Miles Scholarship—An endowed scholarship has been established by friends and former students of the late Gayle Miles for students from Barbourville High School. Miss Miles taught at both Barbourville Elementary School and Union College.

John and Minnie B. McGaffee Trust Fund—Dr. and Mrs. O.J. Wilson, of Bowling Green, Kentucky, have established the John and Minnie B. McGaffee Trust Fund for the purpose of providing financial assistance to worthy and needy pre-ministerial students. The income may be used for

grants or loans, with preference being given to students from the Appalachian Region of Kentucky.

National United Methodist Scholarships—The Board of Education of The United Methodist Church makes available annually several United Methodist Scholarships of $500. The awards are made on the basis of character, need, and scholastic ability. Only students having at least a "B" average are eligible.

Mr. and Mrs. Hiram H. Owens Memorial Scholarship—Mrs. Sampson B. Knuckles (Jean) and Mrs. Buford T. Clark (Eleanor) have endowed a scholarship for a Knox County student in memory of their parents, Mr. and Mrs. Hiram H. Owens. Mr. Owens was a well-known lawyer and Mrs. Owens (Georgia Black) was the daughter of James D. Black, a governor of Kentucky and a president of Union College.

Emory Evan Peter Memorial Endowment—The late Mrs. Laura P. Dickey, of Louisville, Kentucky, established an endowment fund in memory of her brother, Emory Evan Peter. The income from this fund will be used to help finance the college student-aid program.

Donald Rankin Memorial Scholarship—Friends of Donald Rankin, a Union College student killed in Vietnam, have provided a scholarship that pays $100 annually to a young man from Kentucky. Basis for awarding the scholarship is need and the earnest desire for a college education.

E.O. Robinson Mountain Fund Scholarship—The E.O. Robinson Mountain Fund has established an annual scholarship program to assist needy students who reside in the Appalachian Region of Eastern Kentucky. Students receiving these scholarships should give promise of being able to complete their academic work successfully. They should be and remain unmarried while receiving assistance from this scholarship. Qualified persons should apply to the Office of Financial Aid.

Sanders Honor Scholarships—The late Colonel Harland Sanders, of Shelbyville, Kentucky, provided a number of honor scholarships annually. Mrs. Claudia Sanders, his widow, continues to provide them. The Sanders Honor Scholarships are limited to students who do not use tobacco and alcoholic beverages.

Sims Scholarship Fund—Reverend ... Mrs. Harry C. Sims, of West View, Kentuc... have established a scholarship fund ... Union College to aid worthy stude... preparing for the United Methodist minis...

The Catherine Faulkner Singer Memo... Scholarship—This $400 scholarship ... been established by friends, alumni, and ... daughter and son—Marcia and Donald—... the son or daughter of an alumnus of Un... College. The honoree was Director of Alur... Affairs from 1961 to 1978.

Cawood Smith Harlan County Scho... ship—Mr. Cawood Smith, Harlan County ... torney, has established an endowment fc... scholarship to be awarded to the son ... daughter of a miner from Harlan Cour... Kentucky. The recipient shall be a residen... Harlan County and is to be selected upon ... basis of need, scholarship, and promise ... future usefulness to the coal region. T... grant shall be $2,000.

Margaret Carter Stacy Scholarsl... Fund—Margaret Carter (Mrs. Cortis ... Stacy of West Liberty, Kentucky, has ... dowed a scholarship fund for the support ... students from Morgan County, Kentucky ... for Appalachian students. Mrs. Stacy is ... strong United Methodist with interest ... higher education for the youth of ... palachia.

Dr. and Mrs. Charles B. Stacy Memor... Scholarship Fund—A scholarship fund h... been endowed in memory of Dr. and M... Charles B. Stacy of Pineville, Kentucky, ... students from southeastern Kentucky. ... long-time friend of Union College, Dr. Sta... had an abiding interest in the education ... the Appalachian region.

Lewis Ogden Stiles Endowme... Fund—The late Mrs. Lewis Ogden Stiles, ... Waco, Texas, established this fund ... memorialize her late husband, Lewis Ogd... Stiles, and his first wife, Pearl Long Stil... both faithful United Methodists of Irvingt... Kentucky. The income from this fund will ... used to finance grants-in-aid under the c... lege loan-grant program to United Method... students planning to enter the ministry ... the Kentucky or Louisville Annual Co... ference.

The Walter B. and Geraldine G. Sutt... Memorial Scholarship—An annual schol... ship will be given to a Knox County stude... attending Union College. The selection w...

determined by the student's need, demic ability, and promise of future ulness. The endowment is provided by daughters: Carla Sutton Combs and n Sutton Prichard.

ytle and Dorothy Swope Scholar-—Dr. Samuel G. Swope of Louisville, ucky, a trustee of Union College, and F. am Swope, of Elizabethtown, Kentucky, e established a scholarship endowment memorial to their parents. Funds for the owment came from their parents' estate. o four scholarships are awarded annual- ith grants of $750 each. Preference is n to students born in Kentucky, Ohio, or da.

ulbert Taft, Jr., Memorial Scholarship— Thomas C. Haydock, Sr., of Cincinnati, , has provided a scholarship endow- t as a memorial to her late husband, ert Taft, Jr. The income from the endow- t will be used annually to provide one or e honor scholarships to needy students ng high academic potential.

dward Townsend Memorial Scholar-—Dr. Milton H. Townsend has endowed holarship with preference being given to story and political science major. The t is in memory of Dr. Townsend's late er.

llan Tuggle Scholarships—Allan Tuggle, ., of Charlotte, North Carolina, an alum- of Union College, has established a mber of scholarships in mathematics and sics.

everal of the scholarships are awarded to ering freshmen on the basis of a com- tive examination. Other scholarships are rded to current students with majors or ors in mathematics or physics on the is of academic achievement. Some of the olarships may be in the form of work nts.

nion National Bank Scholarship—The on National Bank of Barbourville, Ken- ky, has established a half-tuition scholar- at Union College to aid worthy students n Knox County, Kentucky. It is awarded student graduating from a high school in x County, for the freshman year at Union lege.

larry C. Viall Memorial Scholarship—Mrs. ry C. Viall, of Barbourville, Kentucky, has owed a memorial scholarship for a dy, qualified student with preference go- to an individual from Knox County. The annual $1,000 scholarship is given in memory of her late husband, Harry, who was a prominent local businessman.

Mr. and Mrs. O.H. Viall Memorial Scholarships—The family of Mr. and Mrs. O.H. Viall, of Barbourville, Kentucky, has established a memorial scholarship fund at Union to aid worthy students. The number and size of the scholarships vary according to student financial need.

The Robert E. and Ann Viall Endowed Scholarships—Mr. and Mrs. Robert E. Viall, of Barbourville, Kentucky, have established endowed scholarships that provide $5,000 annually for worthy students from either Knox or Bell County.

William M. Wilson Memorial Scholarship—The late Mrs. Eva Oldfield Wilson, of Barbourville, Kentucky, established a scholarship fund in memory of her deceased husband. The income from the fund will be used to provide an annual grant of $350 for a promising student preparing to teach in the elementary or secondary schools.

Dr. Henry M. Zimmerman Scholarship—The late Dr. Henry M. Zimmerman, of Pompano Beach, Florida, established a scholarship endowment, for needy students of exemplary character who show promise of being able to contribute to the well-being of their country and their fellow man.

Endowments

The Russell M. Bennett Memorial Professor of Sociology Chair—Mrs. Helen Hunt Bennett gave $75,000 to Union in 1946 for the endowment of this professorship. An additional $2,000 was given for the equipment of the Business Department.

Andrew and Emma Elizabeth Edinger Memorial Fund—This fund was established by the late Mr. Joseph Edinger in memory of his mother and father. The fund has been increased by other members of the family and the income designated for use in the maintenance of campus buildings.

James P. Faulkner Memorial Endowment—James P. Faulkner, of Barbourville, Union College president from 1897 to 1905, gave property to the college, the sale of which produced $57,500. The income from this investment is used for salary support for a faculty member in philosophy.

Anna E. and John William Harris Memorial Fund—The late Dr. J. William Harris established a lectureship fund containing the sum of $30,000 in memory of his sister, Anna E. Harris, and his father, John William Harris.

Charles and Leona Jennings Memorial Funds—Dr. Charles M. Jennings, of Marietta, Georgia, has established an endowment fund in memory of his parents, Charles and Leona Jennings, the income from which is to be used to provide an annual bonus to the head of the Department of Biology at Union College.

William Jones Endowment Fund—The late Mr. William Jones, of Barbourville, Kentucky, established a fund, the income from which is designated for use by the music department to purchase recordings and musical scores.

Jeffrey Kronk Memorial Endowment—This endowment, established by the Senior Class of 1967, in memory of Jeffrey Kronk, a member of that class, will assist in purchasing books for Union College's Lincoln-Civil War Collection.

Francis Landrum Memorial Professor of Religion and Philosophy—The late Mrs. Obed J. Wilson established the Francis Landrum memorial professorship through a bequest of $50,000 in 1927.

Melanie Jean Martin Trust Fund—Dr. and Mrs. O.J. Wilson, of Bowling Green, Kentucky, have established a memorial fund in memory of their granddaughter. The inc from the fund is used to purchase lib books to support the work of the Eng department.

Pearl Sinnett Meyer Memorial Fund— Rev. Dr. Jesse I. Meyer has established endowment fund in memory of his wife, Pearl Sinnett Meyer. The income from fund is designated for the purchase of bo for the Union College library.

Allan Tuggle Endowment Fund—A Tuggle, M.D., of Charlotte, North Carolina alumnus of Union College, has establish fund, which may be augmented from tim time, the income from which is designa for scholarships, awards, and instructi support in mathematics and physics.

Willson-Gross Lectures—The late Dr. Mrs. James Willson, of Floydada, Te established a lectureship endowment memory of Dr. and Mrs. John Owen Gr The purpose of the lectures is to bring nually to the campus distinguished speak to discuss vital issues confronting the Ch tian student.

Colutha J. Taylor Wright Memorial Fun The late Mr. J.S. Wright, of Whitley City, K tucky, established an endowment fund memory of his wife, Mrs. Colutha J. Ta Wright. The initial sum was $1,000.

wards

e: These awards are presented at the an- l Honors Day Convocation. Some are demic in nature; to be eligible for such rds, students' academic records should include any grades of "incomplete."

lpha Psi Omega Award—given by the ional Dramatics Honor Fraternity to the dent who has contributed the most ard Drama at Union College.

nnie Velma and Edward S. Amis ard—given by Dr. and Mrs. Edward S. s to a full-time Christian-service student excels in local church programs.

jornstad Freshman Composition ard—given by Dr. William Bjornstad, a ner faculty member of Union College, and . Bjornstad, to the student achieving the hest writing excellence in freshman com- ition courses as determined by the lish department.

overnor James D. Black Senior ard—given by the late Mr. Pitzer D. Black arbourville to the senior student with the hest scholastic average for the year.

lackwell Political Science Memorial ard—given by the late Dr. Robert Lee ckwell to the senior majoring in history or political science showing the highest demic excellence in the field of political nce.

rwin S. Bradley History Award—to an erclass student with a major in history has the highest scholastic average in rall grades in history earned at Union lege.

athy Brick Memorial Award—given by parents, Mr. and Mrs. Theodore F. Brick hio, to the student showing the highest iciency in competitive swimming.

alculus Award—given by a friend of the ege to the student with the highest nulative average in all three calculus rses offered at Union.

ampus Ministry Award—given to the stu- t who, by his or her actions, exemplifies lessness and concern for the needs and -being of others as determined by the ce of Campus Ministry.

hemical Rubber Company Freshman emistry Award—given by the Chemical ber Company Press of Boca Raton, rida, to an outstanding freshman student in recognition of outstanding scholastic achievement in chemistry.

Chemistry Department Awards—given in Analytical and Organic Chemistry by the chemistry faculty of Union College to the students who have completed those chemistry courses with the best overall average.

Dr. Theodore R. Davies Senior Biology Award—given in memory of the late Dr. Theodore R. Davies to the senior student showing the highest academic excellence in the field of biology.

Eastern Kentucky Essay Award—given by the late Dr. Kenneth H. Tuggle, a trustee of Union College, to the student writing the best essay on Eastern Kentucky history.

Engineering Award—given by a friend of the College to the student with the highest cumulative average in pre-engineering courses.

Evans Phillips Plummer & Company Scholarship Award—given by Evans Phillips Plummer & Company, C.P.A.'s of Barbourville—an annual $500 scholarship to be awarded to the most promising sophomore accounting major. The scholarship is to be used in the fall semester. The recipient also receives a plaque and a cash award.

Gamma Beta Phi Award—given by the Gamma Beta Phi National Honor Society to the full-time student with the highest cumulative average in hours earned at Union College.

Dr. L.A. Geiss Junior Award—given by Dr. and Mrs. L.A. Geiss to the junior majoring in accounting with the highest cumulative standing in that field.

Dr. L.A. Geiss Senior Award—given by Dr. and Mrs. L.A. Geiss to the graduating senior majoring in business with the highest cumulative standing in that field.

Dr. Albert D. Graham, Jr. Social Studies Award—given by Dr. Albert D. Graham, Jr. to the senior majoring in an area of Social Studies who shows the greatest teaching potential in Social Studies as selected by the Union College Education Department.

The Greek Award—given by Dr. Robert D. Matthews to the student showing the highest academic excellence in koine Greek.

Health and Physical Education Award for Men—given by the Union College Health and Physical Education Department to the male

senior major with the highest cumulative academic standing.

Health and Physical Education Award for Women—given by the Union College Health and Physical Education Department to the female senior major with the highest cumulative academic standing.

Iota Sigma Nu Freshman Award. given by the Iota Sigma Nu Honor Society to the freshman with the highest scholastic average for the year.

Iota Sigma Nu Sophomore Award—given by the Iota Sigma Nu Honor Society to the sophomore with the highest scholastic average for the year.

H.B. Jones Business Enterprise Award—given in memory of Mr. H.B. Jones to the student who has shown initiative and enterprise in the field of business.

Steve Jones Memorial Award—given in memory of Steve Jones, a Union College graduate, to the Varsity Letterperson with the highest cumulative academic average.

The Literature Award—given by the Tuesday Club of Barbourville to the student majoring in English who shows the greatest excellence in the field of literature.

Mathematics Award—given by a friend of the College to the graduating senior math major who has the highest cumulative average in math courses.

Samuel A. Matthews Memorial Award—given by Dr. Robert D. Matthews to a junior or senior pre-ministerial student whose life and work show the promise of Reverend Samuel A. Matthews' fifty-year ministry in the Southern Illinois Conference of the Methodist Church.

Dr. Mahlon A. Miller President Emeritus Award—given by Dr. and Mrs. Mahlon A. Miller to the senior with the highest cumulative average earned at Union College.

Rena Milliken Award—given in honor of Miss Rena Milliken, Professor Emeritus of Business at Union College, by the Union College Business Department to the graduating senior who shows the greatest potential for professional achievement.

Dr. Paul Muncy Memorial Award—given by the Board of Trustees and members of the Muncy family to the senior pre-medical student with the highest cumulative academic standing.

Music Faculty Award—given by the Un College Department of Music and Fine A to a music major for interest, initiat cooperation, musical ability, academics service to the department

H.H. Owens History Award—given by late Mrs. H.H. Owens to the student show the greatest excellence in the field of hist

Laws and Esten Parks Award—given Dr. S. Laws Parks, former Vice President Business Affairs at Union College, and M Parks, to the senior religion major with highest cumulative academic standing.

Physics Award—given by a friend of College to the student showing the great excellence in the general physics course

Sampson Political Science Award—gi by the late Governor Flem D. Sampson to junior showing the highest academic cellence in the field of political science.

William Hugh Smith Memorial Award given in memory of the Reverend Willi Hugh Smith to a pre-ministerial or Christi service student (with preference being giv to a Christian-service student) who sho promise of future usefulness.

Hattie Stanberry Ecology Award—giver memory of Hattie Stanberry, an alumna a former faculty member, to the student organization that has made a contribution environmental improvement in the acader year. If there is no qualified candidate, t $50 stipend shall go to the College's Soc Club, or, if there is none, it shall go to t Annual Fund.

Thomas Storrar Memorial Award—giv in memory of Thomas Storrar, former dir tor of Union College's food services, by t Circle-K Fraternity to the student who emplifies the honesty, concern, and perso commitment to the Union College commu ty that was displayed by Mr. Storrar.

Student Activities Appropriations Comm tee Student Organization Achieveme Award—given by the Student Activiti Appropriations Committee to the camp organization which, in the committe opinion, has contributed the most towa campus activities during the academic ye

Student Center Board Award—given members of the Student Center Board to t senior member(s) contributing the most d ing the year to the Board and to student a tivities at Union College.

tudent National Education Association ard—given by the John Owen Gross pter to the graduating senior showing greatest excellence in the field of educa- .

atherine V. Sutphen Memorial Award—en by the Alumni Association of Union lege to the student who has used his or talents best during his or her years at on College serving the Music department.

heta Phi Delta Award—given by the nge & Black and Stespean staffs in honor Dr. Frances Patridge, Vice President for dent Affairs at Union College, to seniors o represent the qualities of outstanding vice exhibited by Dr. Patridge.

udge W.W. Tinsley Family Memorial ard—given by the late Mrs. Mayo Tinsley hfon to the junior or senior preparing for gal career showing the greatest promise uture success.

nion College Women's Club Centennial ard—given by the Union College men's Club to the campus organization t is most active in planning and im- menting programs in keeping with its pur- e, social or professional.

everly P. and Mossie B. Wilson Memorial ard in English—given by Dr. and Mrs. O.J. son in memory of Dr. Wilson's parents, to English major with the highest mulative grade point average who has mpleted three full years of residence at on College.

r. Cecil H. Wilson Junior Award—given Dr. Cecil H. Wilson, an alumnus and stee of Union College, to the junior with highest scholastic average for the year.

ohn Henry Wilson Sophomore Award—en by Mrs. Guy D. Attkisson of St. ersburg, Florida, the granddaughter of late John Henry Wilson of Barbourville, the sophomore from the Fifth Congres- nal District of Kentucky who has the hest scholastic average for the year.

GENERAL INFORMATION

Student Load

The normal undergraduate student load is sixteen semester hours per semester. Students who have an average academic standing may register for a maximum of eighteen semester hours credit per semester. Students who attain a "B" average are permitted to earn up to twenty-one semester hours per semester. Exceptions must be approved by the division chairman of the student's major.

The maximum load in each summer term is generally six semester hours. Students whose cumulative grade point average is "B" or better may request permission from the division chairman to take seven hours a term.

Class Attendance

1. Class attendance is required. Each student is responsible for all work from the first day of class and is expected to attend all meetings of the class for which he is registered. This is regarded as a matter of individual student responsibility.
2. All faculty members are expected to keep accurate records of class attendance.
3. Class absences due to circumstances beyond the control of the student will be excused by the teacher involved if request is made within one week of return to the campus. Class work or tests in these classes must be made up.
4. Class work and tests missed due to illness of the student can be made up only when the student presents the teacher with a valid excuse when he returns to class.
5. Class work and tests missed by a student while he is participating in an activity sponsored by Union College may be made up only when the faculty sponsor of such an activity signs the official absence list of students.
6. A student is not automatically withdrawn when he stops attending a class. Official withdrawals are made only on forms provided by the Registrar's Office. It is the student's responsibility to complete this form, obtain the signatures needed, and return it to the Registrar's Office. Failure on the part of a student to follow this withdrawal procedure will result in a grade of "F" for the term.

Examinations and Reports of Marks

Examinations are held at the close of each semester. Tests are held at such times during each semester as the instructors may determine. Mid-semester and semester grades are reported by the instructors to the Registrar. Mid-semester grades are mailed to students' advisors as soon as possible, and students are urged to obtain these grades from their advisors. Where permission to mail grades to parents has been given, grades of students receiving a grade of "D" or "F" at mid-semester will be mailed to home addresses ten days after classes resume following the mid-semester break. Copies of final semester grades are given to students and, where permission has been granted, mailed to parents. Only final grades become a part of a student's permanent record.

Credit/Fail System

Students may take two courses per academic year (June through May) on a Credit/Fail basis. Only two courses may be taken in a single discipline. A student must apply in the Registrar's Office for the Credit/Fail Option no later than the Friday following mid-term. When the instructor turns in a letter grade at the end of the semester, a "D" or above will be recorded as "Credit." An "F" will be recorded as such. This option encourages students to take courses they otherwise might not attempt and where they fear the grade might lower their grade point average. The semester hours earned by "Credit" count, but no quality points are earned. Once this option is chosen, it may not be changed. No course which is required for a student's major or minor can be taken Credit/Fail.

Quality Point Standing

The quality point standing of a student is determined by dividing the total quality points which he has earned by the total number of semester hours for which he has registered minus the number of hours of Credit and Incomplete on his record.

Honor Students

Union College recognizes excellent scholarship in three ways: the Dean's List, the Presidential Laureates, and graduation with honors.

The Dean's List is comprised of those students who have completed at least 12 hours of graded work with a 3.25 grade p average and no grades of "I" for semester. This list is published after the and spring semesters.

Presidential Laureates are those stud who meet all requirements for the De List and achieve at least a 3.75 grade p average for two successive semesters at least 12 hours of graded work and grades of "I" in each semester. The two s mer sessions may be counted as on these semesters if the minimum hours h been earned. The list of students designa as Presidential Laureates is published a the fall and spring semesters.

Appropriate certificates are given recognition of both of these achieveme and graduation honors are noted on diplomas of those receiving degrees distinction (described on page 31 of catalog).

Probation

Students falling below the following gr point average will be placed on Acade Probation:

Freshmen 1
Sophomores 1
Juniors 2
Seniors 2

Probationary students are closely mo tored by the Academic Standing Commit of the College. Students who are academic probation may be restricted as courses taken, be required to repeat cours in which low grades have been earned, lo Union College financial aid, or be suspend from the College.

Suspension

Union College will not accept any cred earned at another institution while a stude is under academic or disciplinary suspe sion from Union College.

The Marking System and Quality Points

Marks are reported in letters as follows:

A— Represents distinctly superior wor valued at four quality points for eac semester hour.

B— Represents above average work, value at three quality points for eac semester hour.

C— Represents average work, valued at tw quality points for each semester hour

– Indicates that a course has been passed satisfactorily.
– Represents inferior but passing work, valued at one quality point.
– Indicates failure with 0 credits and 0 quality points for each semester hour or failure to officially withdraw from a course.
– Indicates that a student withdrew during the first 12 weeks of the semester.
– Indicates that in the opinion of the instructor the student has not been able to complete the required work of the course on time due to unavoidable circumstances.

n "I" received at the end of any semester st be removed before the end of the next nester if the student is enrolled for that n. If the student is not enrolled, the "I" st be removed before the end of the month period following the date on which "I" was received. Any exceptions to the e limit must be made by agreement of the ructor, division chairman, and Registrar. n "I" is not removed within that time limit, mains on the permanent record and can- be made up.

student who does not take final exnations at the end of a semester will be en temporary registration in the next nester within the time allowed for istration. All final examinations for rses which are prerequisite to courses in ch the student may be enrolled the next nester must be taken by the end of the istration period. Failure in any of these requisite courses will cancel the dent's enrollment in the advanced rse.

edit By Examination

The student will apply for credit by examination at the Office of Experiential Education. An initial screening interview will be conducted and the division chairman and appropriate faculty member will be consulted to determine if an evaluation seems feasible.

If an evaluation is feasible, the student will take a completed application form to the faculty member and arrange for an evaluation date. The faculty member will prepare an evaluation procedure, carry out the evaluation, and report the results to the Office of Experiential Education.

Reported results will include a recommendation as to whether or not credit should be awarded and a description of the evaluation procedure and student performance. This material will be maintained on file in the Office of Experiential Education.

4. The recommendation and evaluation description will be forwarded to the division chairman or a designated representative for review. If the division representative does not concur, the faculty member, designated representative (if there is one), and the division chairman will meet with the Director of the Office of Experiential Education to seek a resolution.
5. Successful completion of a challenge examination will be reported to the Registrar by the director and will be recorded as "Credit" on the transcript. An unsuccessful challenge will not be recorded.
6. Students enrolled in a course may request a challenge examination only within the period when a new course may be added.
7. Challenge examinations may not be used for developmental courses, to repeat a course, or remove an "F" from the transcript.

Extension and Correspondence

Any student planning to graduate from Union College must receive permission from the Registrar to register for correspondence or extension courses. Credits cannot be recorded unless prior arrangements are made.

Students enrolled for a full-time program of study shall defer work on all correspondence and extension courses during the term for which they are registered.

Not more than twelve semester hours of correspondence or extension work done in one academic year will be accepted by the College. Not more than one-fourth of the courses in a major may be completed by extension. Not more than thirty-two semester hours of extension and correspondence credit will be accepted toward a degree.

Not more than six semester hours extension or correspondence may be accepted during the senior year. Students with sixty semester hours or fewer at Union may offer six semester hours non-residence in the last thirty-six; students with sixty-one semester hours or more may offer six semester hours out of the last twenty-four.

Failures or quality point deficiencies in any course done in residence cannot be removed by extension or correspondence work.

Graduating seniors must complete any correspondence work needed for graduation at least three weeks before the date of Commencement.

Graduation Requirements

Requirements for Graduation—Bachelor of Arts Degree, Bachelor of Music Degree and Bachelor of Science Degree.

The candidates must satisfy the following requirements:

1. Minimum of 128 semester hours. Thirty of the last thirty-six must be earned in residence at Union College. Students who have earned as many as sixty-one semester hours at Union College may graduate with only eighteen of the last twenty-four hours earned in residence. At least forty semester hours must be in courses numbered 300 and above.
2. Quality point standing of 2.00 overall and at Union, and in all courses taken in the major or minor fields.
3. Completion of the **General Studies Requirements** (see p. 36).
4. The equivalent of 12 semester hours of a single foreign language not native to the student is required for the Bachelor of Arts Degree. Equivalency shall be determined by the successful completion of the fourth college course of the language. Students with prior training in that language at the high-school level may be eligible for advanced placement in the sequence of courses and meet the requirement with fewer than twelve credit hours.

   Religion majors may substitute a year of Hebrew and a year of Greek for the language requirement for the Bachelor of Arts degree.
5. For the Bachelor of Science degree the student must meet all graduation requirements, including a major or area. A foreign language may or may not be required as determined by the individual discipline.
6. Completion of either:
   a. A major as determined by the faculty of the individual discipline.

      Majors are offered in Accounting; Biology; Business Administration; Business Education; Chemistry; Christian Education; Church Music; Drama; Drama and Speech; Ele tary Education; English; He Education; History; Mathema Mining Management; Music; M and Business; Music Education fice Administration; Physical Ec tion; Physics; Psychology; Reli Secondary Education; Sociology

      Minors are offered in Accoun Appalachian Studies; Biol Business Administration; Chemi Coal Mining Technology; Comp Information Systems; Drama; Dr and Speech; Economics; English vironmental Studies; Health Ed tion; History; Mathematics; Mu Office Administration; Philoso Physics; Psychology; Relig Sociology.

   b. An area, the structure of whic determined by the faculty of the sion in which the area requirem are met.

      Areas are offered in Busin English; and Science.
7. At least forty semester hours offere graduation must be earned in junior senior courses (300 and above); at l six semester hours 300 and above, e ed at Union, must be included in minor; at least nine semester hours and above, earned at Union, must b cluded in any twenty-four hour majc least twelve semester hours 300 above (evenly distributed in the fields if this is a combined major), e ed at Union, must be included in a th hour major; at least eighteen seme hours 300 and above, earned at Ur must be included in an area.
8. At registration each senior must spe the tentative date on which he exp to graduate.
9. Advice in arranging schedules choosing courses is always given gla however, each student is responsible completing all requirements.

Combined Degrees

The bachelor degrees may be granted students who have completed three ye of work at Union College and one yea work in an accredited professional sch with the following provisions:

1. The work in the professional sch must continue the curriculum in which student has been enrolled at Union Coll (pre-law, pre-dentistry, pre-medicine, etc

2. The student must have comple satisfactorily the minimum requireme

hree years of pre-professional work at
n College (ninety-six semester hours
a quality-point standing of at least
and also the general college re-
ements for graduation, including the
gn language requirement if a B.A. is
red.

The student must have completed
sfactorily the minimum requirements
ne year of study at the accredited pro-
ional school in which he is enrolled.
number of credits at the end of the four
s of study must total at least 128
ester hours.

grees With Distinction

ors in scholarship are recorded on the
omas of the students earning them, and
ished in the Commencement program.
re are three grades of honors
gnated respectively: *cum laude, magna
laude,* and *summa cum laude.* These
ors are conferred at graduation upon
ents who satisfy the following condi-
s of scholarship:

he honor of *cum laude* is awarded to
e students who have earned an average
ding of 3.5 overall and at Union.

he honor of *magna cum laude* is award-
o those students who have earned an
age standing of 3.75 overall and at
on.

he honor of *summa cum laude* is award-
o those students who have earned an
age standing of 3.9 overall and at
on.

udents coming from other colleges
receive general honors on completing
emester hours of resident study and
sfying the conditions of scholarship
cribed by the faculty, provided they fur-
also such evidence of high scholarship
he institution from which they come as
, in the judgment of the faculty, entitle
n to become candidates for honors
er the regulations.

s a reward for excellence in scholarship
to promote diligence in study and en-
rage high ideals, the honorary
olastic fraternity of Iota Sigma Nu was
nded on May 26, 1936. Membership is
n upon election to:

All who have met the requirements for
raduation with honors.

All students who have at least 74 hours
vith a 3.2 quality point standing or 100
ours with a 3.0 quality point standing
nd who have completed a minimum of
wo years in residence at Union College.

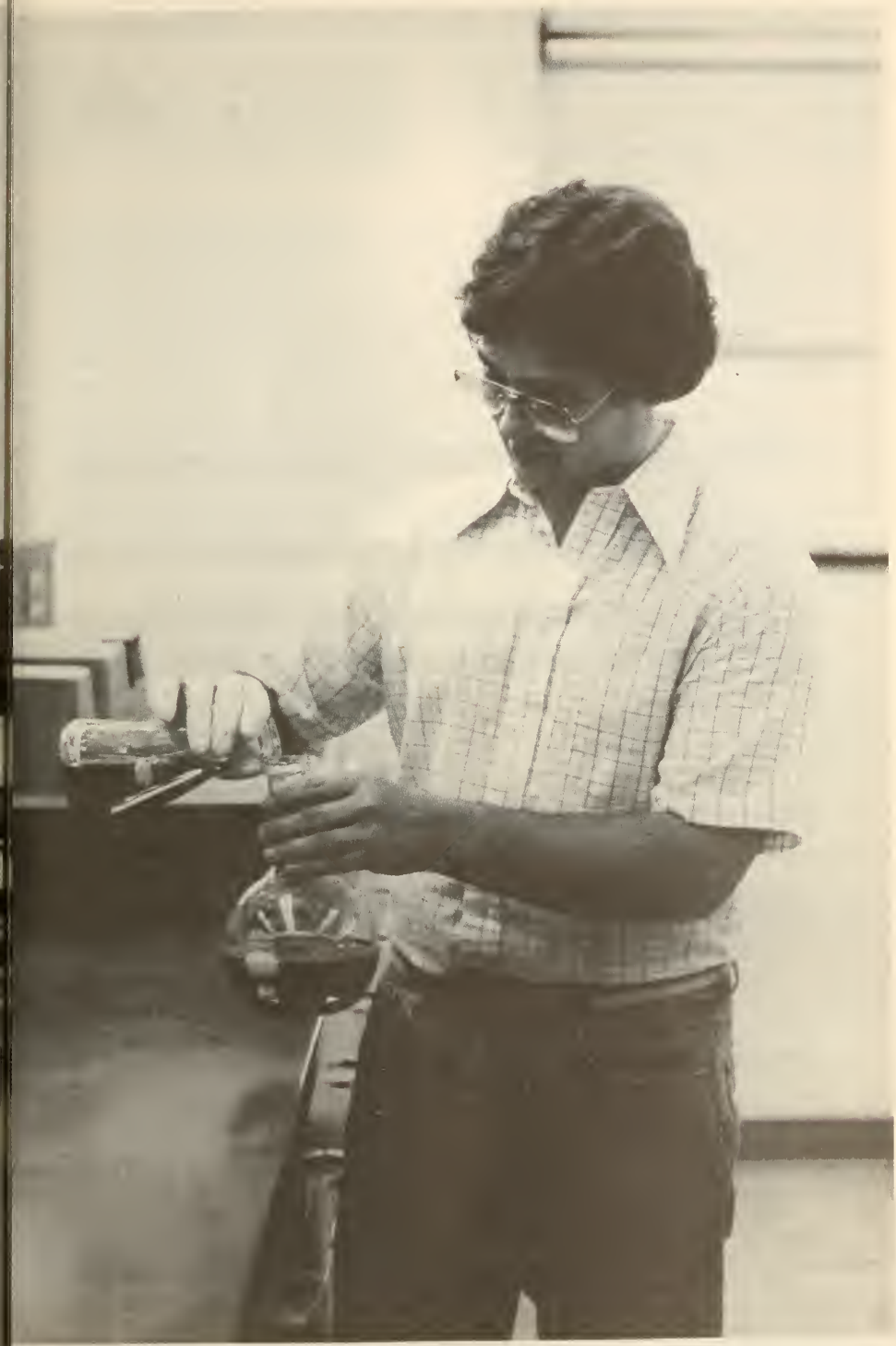
Planned Curriculum

At the beginning of the junior year, a planned curriculum will be developed by the division chairman at the student's request. This is a binding agreement between the College and student. Once the curriculum has been completed only changes approved by the Registrar are binding on the College.

Academic Amnesty

Students having received a grade point average (GPA) of less than 2.0 in a semester may apply once only to the Registrar for academic amnesty after having completed two consecutive semesters of 12 hours or 12 hours of summer work with a minimum GPA of 2.0. Course titles and grades remain as previously recorded on the academic record. Credit will be given for courses with grades of "C" or higher. None of the grades in the semester for which academic amnesty is granted will be used in calculating the GPA. Transfer students bringing less than a 2.0 GPA or having received any form of academic amnesty at another institution do not qualify for any amnesty option at Union. Students who receive amnesty will not be eligible for academic honors based on cumulative GPA.

Students who have been out of school for two years or less may be readmitted on a conditional basis and apply for academic amnesty after completing two consecutive semesters of satisfactory (2.0) work. Students who have been out of school more than two years will be treated as transfer students.



CURRICULUM

MAJORS AND DEGREE PROGRAMS

A college major is actually a means to an end—the means by which a student prepares for a future career, entrance into graduate school, or some change in his life style. Union College offers a wide range of majors and minors, as part of t Bachelor's degree and a number of c tificate and 2-year Associate degree p grams for those not needing a full 4-ye degree.

DEGREE AREA	BA/BM/BS Major	BA/BS Minor	Assoc. Degree	Certificate	Program
Accounting	•	•	•		
Business Administration	•	•	•		
Business and Music	•				
Business Education	•				
Computer Info. Systems		•	•		
Economics		•			
Medical Secretarial Admin.			•		
Office Administration	•	•	•	•	
Elementary Education	•		•		
Secondary Education	•				
Vocational Education			•		
Health Education	•	•			
Physical Education	•				
English	•	•			
Drama	•	•			
Drama and Speech	•	•			
Church Music	•				
Music	•	•			
Music and Business	•				
Music Education	•				
Christian Education	•				
Philosophy		•			
Religion	•	•			
Appalachian Semester				•	
Appalachian Studies		•			
History	•	•			
Pre-Law					•
Psychology	•	•			
Sociology	•	•			
Biology	•	•			
Chemistry	•	•			
Coal Mining Technology		•	•		
Environmental Studies		•			
Mathematics	•	•			
Medical Technology					•
Mining Management	•				
Physics	•	•			
Pre-Dentistry					•
Pre-Engineering					•
Pre-Medicine					•
Pre-Optometry					•
Pre-Pharmacy					•
Pre-Physical Therapy					•
Pre-Veterinary Medicine					•
Science Education			•		

ndecided Majors

udents who have not made a vocational
professional choice will be assigned an
visor in the Career Counseling Office.
nce a choice is made, the student will be
assigned to a faculty advisor in the ap-
opriate discipline.

ourse Numbering System

urses numbered 100 or 200 are intended
imarily for lower division students and
0- and 400-level courses are generally
served for upperclassmen. Freshmen or
phomores desiring to enter 300- or
0-level courses should confer with the
vision chairman involved for permission
enroll. 500-level courses are restricted to
aduate students.

Courses with hyphenated numbers
01-102) are used when the first semester
prerequisite to the second.

Reserved Course Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used in any department although they are not shown in the following pages under the specific listings.

001-099	Non-credit special interest courses.
181,281,381, 481,581	"Special Topics" courses—classes developed on a one-time or experimental basis, or a special innovative class.
282,482,582	Special workshops, credit or non-credit.
283,483,583	Television courses through Kentucky Education Television Network
184,284,384 484	May interim courses not listed under a regular catalog number.
285,485	Experiential Education—internships, cooperative work experience and vocational work experience.
287,487	Field Practicum in specialized areas.
495,595	Independent Study—individual research on approved topics not found in traditional courses. May be repeated on different topics.

Special Notations

Each course description indicates the semester the course will be offered—(F) for Fall Semester, (S) for Spring Semester, and (Sum) for Summer Session.

Many regular year courses are offered in summer sessions but are not guaranteed offerings.

Courses indicated as being offered in "Even Years Only" are offered on an alternate year basis in academic years *beginning* with even numbers, as 1978-79—"Odd Years Only" courses are offered on an alternate year basis in academic years *beginning* with odd numbers, as 1979-80.

Students should consult regularly with their advisors to ensure proper progress toward their degree. During the junior year, a final planned curriculum is prepared which constitutes a contract for the courses remaining to be completed in order to earn the degree. It is the student's responsibility to initiate the process of developing the planned curriculum.

General Studies Requirement

The General Studies Requirement consists of two components:

1. **The Basic Component:** courses taken at the 100- and 200-level which should b completed during the first two years of a student's four-year academic program These courses are arranged into eight perspectives; each student must complet the requirements of all eight perspectives. The courses in each perspective ar listed below.

2. **The Advanced Component:** courses taken at the 300- or 400-level which allow for a mor thorough study in one or more perspectives covered in the Basic Component.

The Basic Component:

I. **Communication Skills.** These courses are required of all students.
English 111 - Freshman Composition I, **and**
English 112 - Freshman Composition II.

II. **Mathematics Perspective.** One course must be chosen from the following:
Mathematics 108 - Intermediate Algebra
Mathematics 111 - College Algebra and Trigonometry
Mathematics 203 - Structure of the Number System
Mathematics 211/Behavioral Sciences 245 - Basic Statistics

III. **Aesthetic Perspective.** The requirements in this area may be satisfied by one of the following two options:

A. One course in literature chosen from
English 221 - Survey of English Literature
English 222 - Survey of English Literature
English 241 - Major American Writers
English 242 - Major American Writers
English 272 - Special Topics in Literature

Plus: one course in drama, music, or graphic arts chosen from
Art 132 - Introduction to Art
Drama 131 - Introduction to Theatre
Humanities 202 - Introduction to Film
Music 121 - Introduction to Music
Music 122 - Introduction to the History of American Popular Music
Music 161 - Foundations of Music
Speech 231 - Interpretive Reading

OR

B. Two successive courses at the intermediate level of a foreign language (accessible to freshmen who have completed 2 years of French or German in high school).
French 211-212 - Intermediate French
German 211-212 - Intermediate German

IV. **Socio-historical Perspective.**
One course must be chosen from the following history courses:
History 101 - United States History to 1865
History 102 - United States History since 1865
History 130 - Survey of Western Civilization I
History 131 - Survey of Western Civilization II
History 233 - History of Appalachia
History 241 - American Economic History

Plus: one course chosen from the following:
Sociology 131 - Introduction to Sociology
Sociology 141 - Introduction to Sociology of Appalachia
Sociology 251 - Current Socio-Economic Problems
Sociology 255 - Selected Topics in Political Sociology
Sociology 271 - Marriage and the Family
Political Science 110 - Critical Issues in American Politics
Political Science 211 - American National Government
Psychology 111 - Introduction to Psychology
Psychology 210 - Child Development

Geography 101 - Introduction to Geography
Geography 241 - Geography of Appalachia

V. **Natural Science Perspective.** Two courses must be chosen from the following (at least one must include a laboratory):
Biology 111 - Introduction to Biology
Biology 232 - General Zoology
Biology 233 - General Botany
Chemistry 111-112 - General Chemistry
(Chemistry 131-132 - General Chemistry Labs)
Environmental Studies 100 - Man and His Environment
Environmental Studies 110 - Physical Systems of the Environment
Environmental Studies 113 - Geology of Coal
General Science 114 - Astronomy
Physics 101 - Survey of Physics
(Physics 103 - Survey of Physics Laboratory)
Physics 110 - Fundamentals of Physics
(Physics 112 - Fundamentals of Physics Laboratory)

VI. **Philosophical and Religious Perspective.** One course must be chosen from the following:

Religion 111 - Old Testament History, Literature & Interpretation
Religion 112 - New Testament History, Literature & Interpretation
Religion 121 - Primitive Religions
Religion 127 - Archeology and the Old Testament
Religion 212 - Old Testament Prophets
Religion 231 - The Life and Teachings of Jesus
Religion 241 - The Life and Teachings of Paul
Philosophy 151 - Introduction to Philosophy
Philosophy 202 - Logic
Philosophy 261 - Philosophy of Religion

VII. **Economic Perspective.** One of the following options must be chosen:

A. One course in economics from the following:
Economics 153 - Principles of Economics I
Economics 154 - Principles of Economics II
Economics 251 - Environmental Economics

OR

B. Computer Information Systems 131 - Introduction to Computer Information Systems

VIII. **Health and Physical Well-Being Perspective.** One of the following options is to be chosen.

A. One course from the following:
Health 131 - First Aid and Safety Education
Health 270 - Personal and Community Health

OR

B. Three accumulated hours in physical education activities courses.

Any course designated as a basic component general studies course which is also applicable to a student's major field of study may be applied to **both** the student's major **and** the student's general studies requirements.

The Advanced Component:

The Advanced Component requirements may be met by any of the following four options.

OPTION I.

A. One course in communications skills chosen from among:
English 311 - Intermediate Composition
English 402 - Advanced Composition
Speech 341 - Debate
Speech 342 - Persuasion

OR

B. One 3-hour course, to be developed, with emphasis on business/technical writing and oral presentations.

Plus: three courses from an approved list. Of these, three credit hours may be in the student's major. The remaining six credit hours must be outside the student's major requirements. (12 semester hours)

OPTION II.

Simultaneous enrollment in all three courses in a cluster of courses. (12 semester hours)

OPTION III.

Simultaneous enrollment in two courses in a cluster **plus** one of the communications skills courses above. (11 semester hours)

OPTION IV.

Enrollment in the Appalachian Semester. (15 semester hours)

Division of Applied Science

Paul S. Moore, *Chairman*
Department of Business Department of Education
Department of Health & Physical Education

I. DEPARTMENT OF BUSINESS

Allen D. Engle, *Department Head*
Accounting—Business Administration—Business Education
Computer Information Systems—Economics—Office Administration

BACHELOR OF SCIENCE DEGREES IN BUSINESS

In addition to the general college requirements, all candidates for the Bachelor's degree must complete the following courses and one of the major fields listed below. (Students who choose to complete the foreign language requirement may elect to receive a Bachelor of Arts degree.)

Common Courses Required of All Candidates		*Semester Hours*
ACTG 271, 272	Principles of Accounting	6
BUAD 321	Principles of Marketing	3
BUAD 351	Principles of Finance	3
BUAD 352	Principles of Management	3
BUAD 311 or 312	Business Law	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153, 154	Principles of Economics	6
		27

and, as applicable:

Accounting Major		*Semester Hours*
ACTG 371, 372	Intermediate Accounting	6
ACTG 331	Cost Accounting	3
ACTG 376	Tax Accounting	3
ACTG 471	Advanced Accounting	3
ACTG 430	Accounting Theory	3
ACTG 433	Auditing (in addition to core requirement)	3
BUAD 311 or 312	Business Law	3
OFAD 302	Business Communications	3
	Choice of Computer Language (COBOL or RPG)	3
		30

Business Administration Major		*Semester Hours*
BHSC 245	Basic Statistics: Theory and Application	3
BUAD 372	Personnel Management	3
BUAD 451	Business Policy	3
OFAD 302	Business Communications	3
	Choice of Computer Language	3
	Electives from the Department of Business	12
		27

Office Administration Major		*Semester Hours*
BUED 290	General Office Accounting Procedures	3
BUED 431	Office Practice	4
OFAD 112	Intermediate Typewriting	3
OFAD 211	Advanced Typewriting	3
OFAD 122	Intermediate Shorthand	3
OFAD 301	Business English: Theory and Applications	3
OFAD 302	Business Communications	3
OFAD 361	Office Management	3
	Elective from the Department of Business	3
		28

Business and Music Major		*Semester hours*
BUAD 272	Salesmanship	3
OFAD 302	Business Communications	3
	Upper division business elective	3
	Field Placement	3-10
MUSC 161-162	Foundations of Music	8
MUSC 261-262	Harmony	6
MUSC 111-412	Applied Music	8
MUSC 322	Music History	3
MUSC 171, 172, 173, 175	String, Woodwind, Piano, or Brass Class (Choice of any 3)	3
		40-47

BACHELOR OF SCIENCE DEGREE IN BUSINESS EDUCATION

Students should see the Education Department section for Certification Requirements.

Teaching Major in Basic Business		*Semester Hours*
ACTG 271, 272	Principles of Accounting	6
OFAD 302	Business Communications	3
BUAD 311 or 312	Business Law	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153 or 154	Principles of Economics	3
BUED 431	Office Practice or Office Internship	3
OFAD 111, 112	Elementary and Intermediate Typewriting	6
BUAD 352	Principles of Management	3
BUED 362	Methods of Teaching Basic Business Subjects	3
		33

Teaching Major in Secretarial Skills		*Semester Hours*
ACTG 271 or 272	Principles of Accounting	3
OFAD 302	Business Communications	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153 or 154	Principles of Economics	3
BUED 431	Office Practice or Office Internship	3
OFAD 121, 122	Elementary and Intermediate Shorthand	6
OFAD 111, 112	Elementary and Intermediate Typewriting	6
	Business Elective	3
BUED 361	Methods of Teaching Secretarial Business Subjects	3
		33

For endorsements in other business subjects, see the head of the business or education department.

ASSOCIATE OF APPLIED SCIENCE DEGREES IN BUSINESS

The following two-year programs lead to the award of the A.A.S. degrees in the emphasis indicated. Union College provides a "career ladder" approach to learning in that students who complete these degrees may immediately apply the credits earned on the two-year degree toward a Bachelor's degree, or return to college later with the guarantee that the credits previously earned at Union will apply toward the 4-year degree.

Common Courses Required of All Candidates		*Semester Hours*
ENGL 111	Freshman Composition	3
ENGL 112	Freshman Composition	3
BUED 152	Business Math	3
ECON 153	Principles of Economics I	3
COMP 131	Introduction to Computer Information Systems	3
OFAD 302	Business Communications	3
ACTG 271	Principles of Accounting I	3
	Humanities General Requirement	9
	Social Science General Requirement	3
		33

and, as applicable:

Accounting Emphasis (AAS)		*Semester Hours*
ACTG 272	Principles of Accounting II	3
BUAD 311 or 312	Business Law I or II	3
ECON 154	Principles of Economics II	3
BHSC 245	Basic Statistics: Theory and Application	3
	Accounting Electives	9
	Natural Science General Requirement	4
	Free Electives	6
		31

Business Administration Emphasis (AAS)		*Semester Hours*
ACTG 272	Principles of Accounting II	3
BUAD 311 or 312	Business Law I or II	3
ECON 154	Principles of Economics II	3
OFAD 111	Typewriting I (or equivalent)	3
	Natural Science General Requirement	4
	Business Electives	9
	Free (non-Business) Electives	6
		31

Computer Information Systems Emphasis (AAS)		*Semester Hours*
ACTG 272	Principles of Accounting II	3
COMP 321	Application of Programming	3
COMP 331	Systems Analysis	3
ECON 154	Principles of Economics II	3
	Computer Languages	6
BHSC 245	Basic Statistics: Theory and Application	3
MATH 108 or 111	Algebra (Intermediate College, or Algebra and Trigonometry)	3 or 4
OFAD 111	Typewriting (or Equivalent)	3
	Internship and/or Free Electives	3
		30 or 31

Medical Secretarial Administration Emphasis (AAS)		*Semester Hours*
BIOL 151	Medical Terminology	2
BIOL 340	Anatomy & Physiology	4
BUED 331	Office Practice	4
HLTH 131	First Aid & Safety	3
HLTH 270	Personal & Community Health	3

OFAD 111, 112	Beginning & Intermediate Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
OFAD 301	Business English: Theory and Applications	3
		31

Office Administration Emphasis (AAS) *Semester Hours*

BUED 290	General Office Accounting Procedures	3
BUED 331	Office Practice	4
OFAD 111, 112	Beginning & Intermediate Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
OFAD 301	Business English	3
	Natural Science General Requirement	4
	Free Electives	5
		31

Diploma in Office Administration (One-Year Program) *Semester Hours*

ENGL 111	Freshman Composition	3
OFAD 111, 112	Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
BUAD 151	Introduction to Business	3
OFAD 301	Business English	
or OFAD 302	Business Communications	3
BUED 331	Office Practice	4
ACTG 271	Principles of Accounting I	3
	Elective	4
		32

MINORS AVAILABLE TO ALL STUDENTS

Accounting—Twenty-one semester hours in Accounting.

Business Administration—Accounting 271-272, Business Administration 311 and 352, Computer Information Systems 131, Economics 153, and three hours of Business electives.

Computer Information Systems—Accounting 271 and 272 and fifteen hours in Computer Information Systems.

Economics—Twenty-one semester hours consisting of the following: Economics 153, 154, 363; Behavioral Sciences 245; Business Education 353; Business Administration 351; and History 241 or Economics 251.

Office Administration—Twenty-one semester hours including Office Administration 112, 122, 261, 301, Business Education 431, and six hours of Office Administration electives.

ACCOUNTING

Accounting 271. Principles of Accounting I. **(F)(3)**
Discussion of the concept of double-entry accounting. Introduction to the basic procedures in the accounting cycle, receivables, payables, inventories and other systems. *Prerequisite:* Business Education 152.

Accounting 272. Principles of Accounting II. **(S)(3)**
A continuation of Accounting 271, this course covers accounting procedures relative to partnerships, corporations, budgets, costing and financial report generation. *Prerequisite:* Accounting 271.

Accounting 331. Cost Accounting. **(F)(3)**
Special topics in job order and process cost for materials, labor, and overhead with variable and fixed portions. Budgeting and variances from budget are also covered. *Prerequisite:* Accounting 272.

Accounting 371. Intermediate Accounting I. **(F)(3)**
Accounting topics including the income statement, balance sheet and change in owners' equity statements. Cash, receivables, inventories, plant, investments and intangible assets are also covered. *Prerequisite:* Accounting 272.

Accounting 372. Intermediate Accounting II. (S)(3)
Continuation of Accounting 371 covering current liabilities, contingent liabilities, long-term liabilities, accounting for income taxes, and owners' equity. Statement of Change in Financial Position, financial statement analysis and the impact of changing prices are also covered. *Prerequisite:* Accounting 371.

Accounting 376. Tax Accounting. (S)(3)
Problems of federal taxes for individuals, partnerships, and corporations are reviewed in depth. *Prerequisite:* Accounting 272.

Accounting 430. Accounting Theory. (F)(3)
Covers current accounting literature, including publications of the American Institute of Certified Public Accountants (AICPA), the Financial Accounting Standards Board, and the Securities and Exchange Commission (SEC). *Prerequisite:* Accounting 372.

Accounting 433. Auditing. (S)(3)
Topics covered include discussion of the ethics and liability of the auditor, verification, analysis, interpretation of accounting records, issuance of audit reports and other reports by CPA's. *Prerequisite:* Accounting 372.

Accounting 471. Advanced Accounting. (F)(3)
Advanced in-depth discussion of accounting for joint ventures, consolidated statements, inter-company transactions, partnerships, and not-for-profit accounting. *Prerequisite:* Accounting 372.

BUSINESS ADMINISTRATION

Business Administration 151. Introduction to Business. (F)(3)
Forms of business ownership, marketing, personnel management, finance, and government regulations are discussed in an overview of organizations.

Business Administration 272. Salesmanship. (S)(3)
The interpretation of sales techniques and methods, prospecting customers, interviews, sales presentations, demonstrations, and closing the sale are presented.

Business Administration 311-312. Business Law. (F,S)(3)
An overview of laws dealing with contracts, agency, employment, bailment, transportation, real and personal property, leases, and bankruptcy.

Business Administration 321. Principles of Marketing. (F)(3)
Study of the movement of goods from producer to consumer and an examination of the functions of the marketing process, marketing institutions, channels of distribution, legal aspects, and policy considerations.

Business Administration 351. Principles of Finance. (F)(3)
The principal objective of this course is to introduce managerial finance as a functional area of business, including financial analysis, working capital practices, capital budgeting, corporate valuation, cost of capital, and capital structure. *Prerequisite:* Accounting 271.

Business Administration 352. Principles of Management. (F)(3)
The development of organization plans and policies, development of industrial relations, management operations with an emphasis on skills and techniques of leadership.

Business Administration 371. Insurance. (S)(3)
Insurance contracts and the fields of insurance, including fire, marine, casualty, social, disability, life, and property. (Odd years only.)

Business Administration 372. Personnel Management. (S)(3)
Supervision of employees, policies relating to effective utilization of human resources in business concerns. *Prerequisite:* Business Administration 352.

Business Administration 404. Investments. (S)(3)
Intermediate discussion of stocks, bonds, and other investments. Analysis of the theories of investing, return and risk valuation of stock. Course will culminate in the management of a portfolio for differing investment alternatives. (Even years only.) *Prerequisite:* Business Administration 351.

Business Administration 451. Business Policy. (S)(3)
Analysis of management problems, formulation of alternative courses of action, determination of policy decisions. *Prerequisite:* Senior status, and successful completion of Business Administration 321, 351, 352, and 372.

BUSINESS EDUCATION

Business Education 152. Business Mathematics. (F,S)(3)
An introduction to the fundamental processes involving the calculation of percentages, interest, discounting, payroll taxes, and financial statements; includes the use of calculating machines.

Business Education 281. Special Topics. (on demand)(1)

Business Education 290. General Office Accounting Procedures. (S)(3)
The primary objective of this course is to introduce the student to the current accounting practices and procedures required in an office, including all aspects of payroll accounting.

Business Education 331. Office Practice. (S)(4)
Emphasis is placed on the development of office proficiency, records management, internal and external office communications, information processing, and administrative support services. Laboratory required. *Prerequisites:* Office Administration 112 and 122 with a grade of at least "C" or the equivalent.

Business Education 353. Consumer Economics. (S)(3)
The principal objective of this course is to help the student become a well-informed consumer. The course is organized around three areas of consumer impact—consumers themselves, their effectiveness in the marketplace, and their preparation for the future.

Business Education 361. Methods of Teaching Secretarial Subjects. (F)(3)
A study of basic dimensions of methods, materials, and objectives in teaching secretarial subjects in the secondary school. Discussion includes teaching strategies such as questioning, lecturing, problem-solving, constructing lesson plans, constructing valid and reliable tests, interpreting test scores, and presenting lectures on video tape. (Even years only.)

Business Education 362. Methods of Teaching Basic Business Subjects. (S)(3)
A study of the methods, materials, and objectives in teaching basic business subjects in the secondary school. Discussion includes teaching strategies such as questioning, lecturing, problem-solving, constructing lesson objectives, constructing valid and reliable tests, interpreting test scores, and presenting lectures on video tape. (Even years only.)

COMPUTER INFORMATION SYSTEMS

Computer Information Systems 131. Introduction to Computer Information Systems. (F)(3)
Survey of the fundamental computer concepts, hardware, and operations. In the second half of the term, students will be introduced to the fundamentals of programming concepts and documentation standards, using the BASIC programming language as a model.

Computer Information Systems 231. BASIC Programming. (F)(3)
A study of the BASIC programming language including problem definition, flowcharting, solution of problems that are adaptable to business and/or science, and hands-on experience on the micro-computer. *Prerequisites:* Computer Information Systems 131 and one of the following: Mathematics 108 or 111 or Accounting 272.

Computer Information Systems 233. FORTRAN Programming. (F)(3)
A study of the FORTRAN IV programming language including problem definition, flowcharting, solution of problems that are adaptable to business and/or science. *Prerequisites:* Computer Information Systems 131 and one of the following: Mathematics 108 or 111 or Accounting 272.

Computer Information Systems 235. RPG Programming. (S)(3)
A study of the RPG II programming language including problem definition, flowcharting, solution of problems that are adaptable to business applications. *Prerequisites:* Computer Information Systems 131 and one of the following: Mathematics 108 or 111 or Accounting 272.

Computer Information Systems 237. COBOL Programming. (S)(3)
A study of COBOL, a high-level programming language, including problem definition, flowcharting, solution of problems that are adaptable to business applications. *Prerequisites:* Computer Information Systems 131 and one of the following: Mathematics 108 or 111 or Accounting 272.

Computer Information Systems 321. Applications of Programming. (S)(3)
A course to improve the student's ability to build, maintain, and use data files and to permit him to become more proficient in a programming language and the use of magnetic media and systems software. *Prerequisite:* Two programming languages.

Computer Information Systems 331. Systems Analysis. (F)(3)
A study in the analysis and organization of an information processing system which can be adapted to a complete practical application. Students must be able to utilize concepts learned in related Computer Information Systems courses to accomplish this. *Prerequisites:* Junior or Senior status, two programming languages, and approval of instructor.

ECONOMICS

Economics 153. Principles of Economics I. (F)(3)
The primary objective of this course is to introduce the student to macroeconomic theory including a study of the economizing problem, pure and mixed capitalism, demand and supply, the economic functions of government, national income accounting, the business cycle, employment theory, money and banking, and fiscal policy.

Economics 154. Principles of Economics II. (S)(3)
The primary objective of this course is to introduce the student to microeconomic theory, including demand and supply analysis, elasticity, the production function, price and output determination, costs of production, pricing and employment of resources, and market structures.

Economics 251. Environmental Economics. (S)(3)
Societal choice in the use of scarce resources is related to ecosystem survival, environmental quality, and human welfare.

Economics 363. Money and Banking. (F)(3)
The primary objective of this course is to introduce the student to the historical development of the commercial banking system, including an in-depth study of the Federal Reserve System. *Prerequisite:* Economics 153.

Additional Courses listed under: Behavioral Sciences 245, Business Administration 351, Business Education 353, and History 241.

OFFICE ADMINISTRATION

Office Administration 111. Elementary Typewriting. (F)(3)
A first course in typewriting for the secretarial student. Also for those needing one course in typing for personal use. Keyboard and fundamental processes are presented. Students presenting one or more units of high school typewriting may not take this course.

Office Administration 112. Intermediate Typewriting. (F,S)(3)
Emphasis is placed upon techniques, speed, and accuracy. Electronic typewriters and problem typing are introduced. *Prerequisite:* Office Administration 111, one unit of high school typing or the equivalent.

Office Administration 121. Elementary Shorthand. (F)(3)
Principles of Gregg Shorthand, Series 90. Places emphasis on theory and developing reading and writing skills. Letter transcription introduced. Students presenting one or more units of high school shorthand may not take this class. Laboratory required.

Office Administration 122. Intermediate Shorthand. (S)(3)
Greater emphasis placed on writing and transcribing with speed and accuracy. Gregg theory and basic typewriting concepts reviewed. *Prerequisites:* Office Administration 111 and 121 with a grade of at least "C" or the equivalent.

Office Administration 211. Advanced Typewriting. (S)(3)
This is the final course in typing. Simulations in the sales office, general office, accounting office, executive office, legal office, medical office, technical office, and government office are completed on electronic typewriters. Speed and accuracy are emphasized. *Prerequisite:* Office Administration 112 with a grade of at least "C" or the equivalent.

Office Administration 221. Dictation and Transcription. (on demand)(3)
Emphasis placed on speed in taking dictation and in transcription skills. *Prerequisites:* Office Administration 112 and 122 with a grade of at least "C" or the equivalent.

Office Administration 301. Business English: Theory and Applications. (F)(3
Comprehensive review of grammar and usage. Emphasizes and reinforces business applica tions and vocabulary in areas such as business law, word processing, merchandising management, and computer information systems. *Prerequisite:* English 111 with a grade o at least "C".

Office Administration 302. Business Communications. (S)(3
Realistic methods for mastering writing skills needed in business situations. Emphasizes instruction in both the basic and advanced techniques of preparing and organizing business letters, memoranda, and reports. Also enhances speaking, reading, and listening skills. *Prerequisite:* English 111 or Office Administration 301.

Office Administration 361. Office Management. (F)(3
The principal objective of this course is to introduce the student to the theories and prac tices required for effective office administration, including communication skills, staffing and supervisory procedures, space management, and word processing.

II. DEPARTMENT OF EDUCATION

James Kerley, *Department Head*
Elementary Education—Secondary Education

The undergraduate programs in the Department of Education have as their primary objective the preparation of superior teachers for public and private schools, both elementary and secondary.

At Union College the education of prospective teachers is the responsibility of the College as a whole, not the Department of Education alone.

The teacher education programs described in the following pages prepare the student to receive a baccalaureate degree and, upon recommendation of the College, a Kentucky teachers certificate. A student who wishes to teach in a state other than Kentucky should determine certification requirements in that state (usually quite similar to Kentucky's), and plan his program accordingly. Information on certification requirements in other states is available in the Education Department office and in the Career Planning and Placement office.

Students preparing for teacher certification must be admitted to the Teacher Education Program of the College before they will be allowed to register for any of the professional education courses beyond Education 241 or Education 242. These students may not take professional preparation education courses on a Credit/Fail or Independent Study basis.

Graduates may continue their professional preparation by entering the Graduate Studies Program. A separate catalog is available from the Dean of Graduate Academic Affairs.

Objectives of the Teacher Education Program

The Teacher Education Program at Union College seeks to aid each student in the realization of the following objectives:

1. A knowledge of the social, physical, and psychological factors which determine behavior and which promote intellectual growth, emotional balance, and wholesome personality.
2. The development of health habits, physical skills, and recreational interests essential to personal well-being and to highest teaching effectiveness.
3. An understanding of the principles and purposes of education in a democratic society.
4. The cultivation of attitudes and abilities essential to successful relationship with youth and professional associates.
5. An understanding of the principles and techniques of effective teaching, and the development of appropriate teaching skills.
6. An appreciation of the worth of teaching as a career and as an opportunity for service to youth and to society.

Requirements for Admission to Teacher Education Program

I. Students who wish to enter teacher education must prepare a folder for presentation to the Teacher Education Committee for approval. The folder must be complete before the student is admitted to the program and must contain the following:

1. Application to the program and an acceptably written essay (2-3 pages) on "Why I want to be a teacher".
2. Four good recommendations from instructors.
3. Documentation to show that all competency tests have been passed. (Students will be permitted to take the first competency test upon enrollment in Introduction to Education and Early Involvement. Students who present evidence of successful completion of competency tests taken at other institutions and have transferred to Union will have these tests accepted by Union College.)
4. Documentation to show that the student has passed a Teacher Education Interview. (Students who enter under the old program [see III, 1 below] must still pass a Teacher Education Interview.)
5. Documentation to show that the student has a cumulative grade point average of at least 2.25.
6. Documentation to show that the student has completed a minimum of 30 hours.
7. Documentation to show that the student has completed English 111 and 112 with a grade of "C" or better in both courses.
8. Documentation to show that the student has either completed or is enrolled in and taking Introduction to Education and/or Early Involvement when the folder is presented.

II. Students who have failed to pass one competency test or who lack one recommendation or those who are currently enrolled in but have not yet completed Introduction to Education, Early Involvement, and English 112 may be admitted conditionally to the program if all other requirements have been met.

III. 1. Undergraduates entering under the old program must have filed a formal application for teacher education prior to September, 1982.

2. Students who fail a competency test will receive mandatory tutoring (2 sessions a week for 4 weeks) before re-taking any competency test.

Requirements for Admission to Student Teaching

1. Formal written application by mid-term of the semester preceding the planned student teaching. Application forms may be obtained in the Department of Education office.
2. Senior standing is a prerequisite for admission to student teaching.
3. Completion of at least 90 semester hours of credit with at least a 2.5 grade point average in all courses attempted and 2.5 in all work attempted in the area, major, or minor fields for which certification is sought.
4. Completion of three-fourths of all required professional education courses with an academic standing of at least 2.5.
5. Completion of three-fourths of all coursework for the teaching major or area of concentration if student teaching is to be done in this specialization; or completion of all the coursework for the teaching minor if student teaching is to be done in the minor area.
6. Approval of the department in which teaching fields are sought.
7. Moral, social, and ethical behavior acceptable in the school community as well as in the community at large.
8. A valid and current medical examination which includes a tuberculosis test filed with the Teacher Education Committee.
9. Maintenance of good standing since admission to the Teacher Education Program.
10. Completion of institutional prerequisites with respect to time in residence and pre-student teaching laboratory experiences.
11. Acceptance by the Teacher Education Committee of the College.

ELEMENTARY EDUCATION CURRICULUM

I. Pre-professional Course Requirements for all elementary Education majors.
(No courses can be taken on a credit/fail basis except for Psychology 111 and the Social Science course. No General Requirements courses can be taken on an Independent Study basis.)

A. Social Science (History 233 or Sociology 141 or Geography 241) ..... 3 semester hours
B. Introduction to Psychology (Psychology 111) ..... 3 semester hours
C. Children's Literature (English 355) ..... 3 semester hours
D. Structure of the Number Systems (Math 203 and 204) ..... 6 semester hours
E. Elementary School Art (Art 271) ..... 3 semester hours
F. Elementary School Music (Music 373) ..... 3 semester hours
G. Health and Physical Education in Elementary School (Physical Education 261) ..... 3 semester hours
H. Science: Concepts, Processes and Inquiry (General Science 401) .... 3 semester hours

II. Professional Preparation for Elementary Teachers

A. Education 241 - Introduction to Education ..... 3 semester hours
B. Education 242 - Early Involvement ..... 3 semester hours
C. Education 351 - Human Growth and Development ..... 3 semester hours
(Prerequisite: Psychology 111)
D. Psychology 361 - Psychology of Learning ..... 3 semester hours
(Prerequisite: Psychology 111)
E. Special Education 365 - Foundations of Education of the Exceptional Child ..... 3 semester hours
(Prerequisite: Psychology 111)
F. Education 341 - Methods of Teaching Mathematics ..... 3 semester hours
(Prerequisites: Mathematics 203 and 204)
G. Education 361 - Reading in the Primary Grades ..... 3 semester hours
H. Education 362 - Teaching Reading in the Content Areas ..... 3 semester hours
(Prerequisite: Education 361)
I. Education 432 - Methods and Materials in the Elementary School ... 4 semester hours
(Prerequisites: All 200- and 300-level courses listed under General Requirements and Professional Preparation)
J. Education 441 - Methods of Teaching Social Studies ..... 3 semester hours
K. One of the following two courses:
1. Education 451 - Human Interaction in the Schools ..... 3 semester hours
2. Education 454 - The Professional Teacher in the School ..... 3 semester hours
L. Education 433 - Supervised Student Teaching in the Elementary School ..... 12 semester hours

See Requirements for Admission to Student Teaching

SECONDARY EDUCATION CURRICULUM

I. Pre-professional Course Requirements for Students Preparing for Teaching in Secondary School.

A. Personal and Community Health ..... 3 semester hours
B. Introduction to Psychology ..... 3 semester hours
C. Majors, Minors, and Areas of Concentration*
An Area of Concentration ..... 48 semester hours
One Major ..... 30 semester hours
One Major of 30 semester hours and one Minor of 21 semester hours ..... 51 semester hours
D. Social Science (History 233, Sociology 141 or Geography 241) ..... 3 semester hours

*Choose any one of the 3 options listed.

Majors in subject combinations shall require 36 semester hours credit. In a combination of ubjects for majors, no fewer than 12 semester hours shall be in each subject within the ajor. Method courses shall be in addition to those in the majors and minors. Education 362 is equired of students preparing to teach English. A teaching minor in English shall require an dditional 3 semester hours of credit beyond the usual 21 and must include a course in nguistics.

I. Professional Preparation for Secondary Teachers. These courses are to be taken in a six-emester sequence in the following order:

A. Education 241 - Introduction to Education .....3 semester hours
(To be taken with Education 242)

B. Education 242 - Early Involvement .....3 semester hours
(To be taken with Education 241)

C. Education 243 - Generic Teaching Skills .....3 semester hours
(*Prerequisites:* Education 241 and 242 and admission to the Teacher Education Program)

D. Education 351 - Human Growth and Development .....3 semester hours
(Prerequisites: Education 241, 242, 243 and Psychology 111)

E. Psychology 361 - Psychology of Learning .....3 semester hours
(*Prerequisites:* Education 241, 242, 243 and Psychology 111)

F. Special Education 365 - Foundations of Education for the Exceptional Child .....3 semester hours
(Prerequisite: Psychology 111, 361)

G. Education 452 - Methods and Materials for Secondary Education ....4 semester hours
(Prerequisite: Education 365)

H. Education 451 - Human Interaction in the Schools .....3 semester hours
(Prerequisite: Education 365)

I. Education 453 - Supervised Student Teaching in the Schools .....12 semester hours
(Prerequisites: Education 451 and 452).

J. Education 454 - The Professional Teacher in the School .....3 semester hours

See Requirements for Admission to Student Teaching

ASSOCIATE OF APPLIED SCIENCE IN VOCATIONAL EDUCATION (for vocational teachers)

	Credit Hours
English 111 and 112 — Freshman Composition	6
Psychology 111 — General Psychology	3
Speech 131 — Fundamentals of speech	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Social Science Core Requirement	3
Experience Credit for Vocational Certification	6-9
Vocational Education Block (from state approved school) (transfer)	24
Free electives	9-12
	64

ASSOCIATE OF APPLIED SCIENCE IN EDUCATION*

	Credit Hour
English 111 and 112 — Freshman Composition	
Natural Science (Environmental Science 100 recommended)	
Sociology 131 — Introduction to Sociology	
or	
Sociology 421 — Rural & Urban Sociology	
Psychology 111 — Introduction to Psychology	
Humanities Requirement (speech or theatre recommended)	
Art 271 — Elementary School Art	
Music 373 — Elementary School Music	
Education 241 — Introduction to Education	
Education 351 — Human Growth and Development	
Education 440 — Early Childhood Education	
English 355 — Survey of Children's Literature	
Health 270 — Personal and Community Health	
Sociology 371 — Social Institutions	
Health 361 — Principles of Nutrition	
Education 365 — Foundations of Ed. for Exceptional Child	
Supervised Experience in Early Childhood Education	
Electives—(Recommended from Appalachian Semester, Kentucky History, Typing, Recreational Leadership Arts & Crafts, & Structure of Number Systems)	12
	64

ASSOCIATE OF APPLIED SCIENCE FOR GRADUATES OF STATE VOCATIONAL SCHOOLS

	Credit Hours
Credit for 22-month post-high-school vocational program	48
English 111—English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Free elective	3
	64

	Credit Hours
Credit for 11-month post-high school vocational program	24
English 111 — English Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Elective Credits (planned curriculum developed & followed)	27
	64

A "C" (2.00) average is required and a minimum of 15 hours in residence.

For the vocational student wishing to continue his or her education to the Bachelor's degree level, a planned course of study (contract) will be developed so that the degree can be earned with an additional 64 hours of specified credit beyond the A.A.S. degree.

Graduates of the 11-month vocational programs should plan additional hours of general education credits within their electives to better prepare for the 4-year degree.

*Designed for those who work in day care centers and agencies dealing with small children where teacher certification is not required.

EDUCATION

Education 241. Introduction to Education. (F,S)(3)
The purpose and function of education. Classroom and school organization, guidance services, library services, evaluation, reporting to parents and other phases of the school program.

Education 242. Early Involvement Internship. (F,S)(3)
A practical course in which students are assigned to local school classrooms 3 hours per week for 12 weeks, and meet weekly to discuss and generalize their experiences. To be taken concurrently with Education 241.

Prerequisite for the following courses is admission to the Teacher Education Program.

Education 243. Generic Teaching Skills. (F,S)(3)
Acquiring competence in the basic concepts and principles associated with the following skill areas: observation, diagnosis, instructional design and planning, instructional management, communication, evaluating, use of media and new technology. Includes experience in micro-teaching and field placement in local public schools. *Prerequisites:* Education 241 and 242.

Education 341. Methods of Teaching Mathematics in Elementary School. (F)(3)
Modern methods and materials for teaching mathematics in the elementary school. *Prerequisite:* Mathematics 203-204 or equivalent.

Education 351. Human Growth and Development. (F,S)(3)
Basic concepts for understanding the development of the child and the adolescent. Includes field experience. *Prerequisite:* Psychology 111.

Education 361. Reading in the Primary Grades. (F)(3)
Methods and materials for the teaching of reading in the primary grades including observations, micro-teaching demonstrations, making of lesson plans, and evaluation of a child's readiness.

Education 362. Teaching Reading in the Content Subjects. (S)(3)
Emphasis on study skills, individualized programs and reading in the content subjects. *Prerequisite:* (except for English majors) Education 361.

Special Education 365. Foundations of Education of the Exceptional Child. (F,S)(3)
Etiology and assessment of exceptional learning conditions; characteristics of exceptionalities; special education intervention. *Prerequisite:* Psychology 111.

Education 401. Introduction to Counseling and Guidance. (S)(3)
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges, and related service-oriented agencies. Essential counseling and guidance services, policies, practice and procedures. *Prerequisite:* Psychology 111.

Education 432. Methods and Materials in the Elementary School. (F)(4)
Emphasis on language arts, social studies, and science; directed observation; *Prerequisites:* Education 241, 341, 351, 361, and 362; Psychology 361; 90 semester hours college credit; quality point standing of 2.25 overall and at Union College; one semester residence. No late registration.

Education 433. Supervised Student Teaching in the Elementary School. (S)(12)
Laboratory experiences in working with children, teachers, and others in school and community. Supervision by an experienced classroom teacher for a minimum of 12 weeks. Transportation and meals paid by the students. Application to be made one semester in advance. *Prerequisites:* See Requirements for Admission to Student Teaching. A supervisory fee of $100 is charged.

Education 435. Laboratory Experiences in Education. (on demand)(6)
A substitute for student teaching for elementary education majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 242; scholastic standing of 2.25 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; and one semester residence at Union College.

Education 440. Early Childhood Education. (Sum)(3)
Survey of the physical, emotional, mental, and psychological development of the child under six and the role of the kindergarten teachers in working with such a child.

Education 441. Methods of Teaching Social Studies. (F)(3)
Methods and materials for the teaching of elementary school social studies, including kindergarten through eighth grade curricula. The philosophies, terminology, and evaluation of methods and materials will be included.

Education 451. Human Interaction in the Schools. (F)(3)
Considers human interaction in the schools from a variety of perspectives and theories. Addresses the role of classroom management in the learning process. (Students preparing to teach in secondary schools should take this course concurrently with Education 452.)

Education 452. Methods and Materials in the Secondary School. (F)(4)
Current teaching methods, materials, and innovations in the secondary school with directed observations. *Prerequisites:* All 200- and 300-level courses listed under Pre-professional Course Requirements and Professional Preparation.

Education 453. Supervised Student Teaching in the Secondary School. (F,S)(12)
Under the direction of an experienced teacher, the student teacher directs the usual teaching activities in the classroom for a minimum of 12 weeks. Application should be made one full semester in advance of the time the teaching is to be done. *Prerequisite:* See Requirements for Admission to Student Teaching. A supervisory fee of $100 is charged.

Education 454. The Professional Teacher in the School. (S)(3)
Discusses the role of the professional teacher, including professional values, school-community relations and teacher-parent interaction. Discusses aspects of local school operations, i.e., school law and finances. (Students preparing to teach in secondary schools should take this course concurrently with Education 453.)

Education 468. Educational Media. (Sum)(3)
Practice in operating educational media and construction of classroom materials. Emphasis on educational television use in the classroom.

Education 495. Independent Study. (F,S,Sum)(3)
Open only to advanced students in the field of Education who wish to do intensive reading in a specific interest area. *Prerequisites:* Twelve semester hours of Education and permission of the Head of the Department.

III. DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Paul S. Moore, *Department Head*
Health—Physical Education

HEALTH

Students preparing to teach in an elementary or secondary school in Kentucky are required to complete the following courses: for an elementary certificate, Health and Physical Education in the Elementary School; for a secondary certificate, Personal and Community Health.

Requirements for a Major in Health Education: For students choosing to get a teaching certificate, thirty semester hours from the courses listed under the Health department including 270, 330, and 340. In addition to the courses listed under the Health department, the following courses may be taken as electives to be included in the thirty semester hours: Sociology 271, Sociology 311, and Psychology 431.

Requirements for a Minor in Health Education: Twenty-one semester hours which must include Health 270, 330, and 340. Courses must be chosen from those listed under Health Education major.

Health 131. First Aid and Safety Education. (S)(3)
Designed to aid the student in developing an understanding of the basic principles of accident prevention as applicable to the home, the highway, and the school. First aid measures for various injuries and illnesses are discussed and practiced.

ealth 270. Personal and Community Health. **(F)(3)**
The relationship of bodily functions to personal health and grooming, and to community and national health.

ealth 330. School Health Practices. **(S)(3)**
A course dealing with the primary phases of school health—health instruction, health services, and healthful school environment—and how they can be coordinated into a functional health program.

ealth 340. Physiology and Anatomy. **(F)(3)**
A study of cellular construction, tissues, organs, and systems of the human body. A study of the functions of these organs and systems as it deals with health and physical education disciplines.

ealth 361. Principles of Nutrition. **(F)(3)**
A study of the composition, nutritive value, and utilization of food.

ealth 411. Health Education in the Secondary School. **(S)(3)**
The experiences, activities, and instruction of secondary students that lead to intelligent self-direction of health behavior.

ealth 421. Community Health. **(F)(3)**
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

ealth 451. School and Community Health Workshop. **(Sum)(3)**
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

ealth 461. Nutrition for Special Needs. **(S)(3)**
A course focusing on the nutritional needs throughout the life cycle, energy metabolism, and therapeutic applications of nutrition.

ealth 475. Critical Areas in Health. **(F,Sum)(3)**
Specific health problems confronting society today with particular reference to secondary age students.

ealth 485. Field Experiences in Health. **(F,Sum)(3-6)**
A directed field experience in some phase of health, with consideration given to both the needs and interests of the student. Opportunities will be available for practical experiences in the school situation, official health agencies, and voluntary agencies.

ealth 495. Independent Study. **(F,Sum)(1-3)**
Independent study for advanced students only.

HYSICAL EDUCATION

Requirements for a Major in Physical Education: Students choosing to get a Secondary eaching certificate must take thirty semester hours which must include 351, 361, 421, 461, ealth 340, and four service courses. Health 131 may be included in the Physical Education ajor.

Service Courses

A maximum of eight semester hours of service courses may be credited toward graduation. hysical education majors must take four service courses. This is the maximum that can be pplied to a major, but others may be taken as electives. The following service courses also eet the elementary and secondary requirement for physical education.

hysical Education 111. Beginning Swimming. **(F,S,Sum)(1)**

hysical Education 112. Intermediate Swimming. **(F,S,Sum)(1)**

hysical Education 113. Senior Lifesaving. **(F)(1)**
Prerequisite: Intermediate swimming or permission of the instructor.

hysical Education 121. Team Sports. **(F)(1)**

hysical Education 131. Archery and Badminton. **(F,S)(1)**

Physical Education 132. Beginning Golf. (F,S,Sum)(
Physical Education 133. Beginning Tennis. (F,S,Sum)(
Physical Education 134. Personal Fitness and Aerobic Activities. (F)(S)(
Physical Education 135. Tumbling and Trampolining. (Even years.) (S)(
Physical Education 141. Folk & Square Dancing. (Odd years.) (S)(

Professional Courses

Physical Education 241. History of Physical Education. (S)(
From primitive man through the present, with particular emphasis on Greek physic education, European systems, and development of physical education in America. Som research into the history of various sports. (Even years only.)

Physical Education 261. Health and Physical Education in the Elementary School. (F)(
The role of the classroom teacher in physical education on the playground, in the gyr nasium, and the classroom. How to correlate and evaluate. The application of game movements, exploration, rhythms, self-testing activities, and screening tests.

Physical Education 265. Recreational Sports and Activities. (S)(
Presents students with information on various types of sports and activities, wi emphasis on history, rules, equipment, skills, and techniques.

Physical Education 271. Sports Officiating. (F)(
Rules and officiating techniques in football, basketball, baseball, and track. (Odd yea only.)

Physical Education 302. Coaching Basketball. (F)(
(Even years only.)

Physical Education 305. Coaching Track and Field; Swimming and Diving. (S)(
(Odd years only.)

Physical Education 306. Coaching and Officiating Women's Team Sports (F)(
(Even years only.)

Physical Education 307. Coaching Soccer. (F)(
(Even years only.)

Physical Education 317. Organization and Administration of Intramurals. (F)(
Planning, organizing, and directing a program of intramural activities for men and women Attention is given to activities, awards, officials, finances, publicity, and other factor necessary to consider in administering an intramural program.

Physical Education 321. Recreational Leadership. (S)(
Leadership techniques in music, social games, arts and crafts, dramatics, camping nature, and sports. Designed to aid students in enriching their own leisure time and t prepare for leadership in teaching, full-time Christian service, and social service.

Physical Education 351. Tests and Measurements in Health and Physical Education. (S)(
Evaluating Health & Physical Education by the construction and administering of tests Emphasizes reliability, objectivity, and validity of tests, and school marks.

Physical Education 361. Organization and Administration of Health and Physical Education. (S)(
Administration of health and physical education in school. Setting up the program, an evaluating results. Emphasizes budget and finance, office management, preparing the cu riculum, facilities, legal factors, and public relations.

Physical Education 421. Kinesiology. (S)(
An analysis of human motion and its relation to athletic and gymnastic activities; practica application of these principles.

Physical Education 461. Methods of Teaching Physical Education. (F)(
Topical areas such as philosophy, teacher certification, competencies, and professiona activities will be covered. Curriculum construction, instructional methods, class manage ment and techniques for teaching specific activities will be considered as they relate to the secondary level.

Physical Education 495. Independent Study. (F,S,Sum)(
Independent work for advanced students only.

ivision of Humanities

Dianne R. Ferris, *Chairman*
Department of English and Foreign Languages
Department of Music and Fine Arts
Department of Religion and Philosophy

UMANITIES

manities 101, 102, 103, 104. Chapel. (F,S)(1)
Participation in chapel programs is designed to aid the student in achieving the breadth and flexibility of mind necessary for full participation in a complex culture. Four major themes are addressed: (a) God and the relations between God, the universe, and man; (b) ethical questions and moral issues; (c) the ceremony and liturgy of the Church; (d) significant art and music in the Christian tradition. May be repeated for a maximum of four credits in a four-year course of study.

manities 202. Introduction to Film. (S)(3)
Film is studied as an art form concerned with the human values of mankind. Appreciation of film and its basic elements and techniques is stressed. (Odd years only.)

manities 204. History of the Motion Picture. (S)(3)
A study of film's development as a distinctive medium of communication and as an art form. The course offers explorations of landmark films from the silent period to contemporary times. (Even years only.)

. DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES

Jan Finkel, *Department Head*
English—French—German

NGLISH

Requirements for a Minor: A minimum of twenty-one semester hours in addition to English 11, 112, including English 221, 222; 241 or 242; 311; 372; either 351, 352, or 361; and 401 or 421. nglish minors are also advised to take at least six hours of a foreign language.

Requirements for a Major: A minimum of thirty semester hours in addition to English 111, 12, and including all courses required for a minor; either English 321, 322, 331 or 332; and 472. nglish majors are also advised to take at least six hours of a foreign language.

Requirements for an Area: Forty-eight semester hours, thirty of which shall satisfy the requirements for a major, including an advanced writing course; and courses in speech or rama.

Students preparing to teach high school English are required to take Education 362 and hould elect the English major, minor, or area. These students should consult with members f the Education Department for full information about course requirements.

nglish 090-091. English as a Second Language. (F,S)(0)
A preliminary, non-credit course for the foreign student seeking to acquire sufficient competence in listening to and speaking the English language to be able to communicate effectively in the classroom and in the college community.

nglish 110. Developmental English. (F,S)(3)
Training in college-level language skills. Designed to prepare students for English 111 and other introductory courses.

nglish 111. Freshman Composition I. (F,S)(3)
Writing papers from a variety of rhetorical approaches. Reading of short prose pieces as models and for discussion. Must precede English 112.

nglish 112. Freshman Composition II. (F,S)(3)
Literary models and a brief introduction to literary forms provide the basis for longer themes emphasizing critical writing and documentation.

English 121, 122, 123, 124. Journalism Practicum. (F,S)
Actual operation of the *Orange and Black* college newspaper in areas such as editir newswriting, photography, layout, and feature writing. May be taken up to three times credit.

A general prerequisite for 200-level courses is the successful completion of English 111 a 112 with a grade of "C" or better.

English 221, 222. Survey of English Literature. (F,S)
The first half includes the Middle Ages, the Renaissance, the Restoration and Eighteen Century, and the second includes the Romantic and Victorian periods, and the Twentie Century. Either course may be taken separately and not necessarily in sequence.

English 225. Journalism I: News Writing.
Survey of print media history and tradition. Instruction and practical experience in tec niques of investigative reporting and in developing the news story in Associated Pre style and format.

English 226. Journalism II: Editorial, Feature, and Sports Writing.
Emphasis on and experience in writing feature, editorial and sports stories for newspape and magazines. Exploration of free-lance market opportunities for publication of featu and sports articles.

English 227. Journalism III: Editing, Layout, and Photojournalism.
Editing and layout instruction and practice. Headline writing. Photojournalism: composir and shooting photographs with a 35 mm camera, darkroom instruction, and practice in fil developing. *Prerequisite:* English 225 or 226.

English 241, 242. Major American Writers. (F,S)(
The first half begins with Poe and ends with Emily Dickinson (1830-90), and the secon begins with Twain and ends with Faulkner (1890-1950). Either course may be take separately and not necessarily in sequence.

English 272. Special Topics in Literature. (F,S)(
One course in a special topic such as Appalachian Literature, Commerce in Fictio Science Fiction, and Women in Literature will be offered each year.

English 331. Intermediate Composition. (S)(
A writing course designed to reinforce and expand writing skills. Expository and argumer tative papers of substantial length and an extensive research paper. Appropriate selecte readings for discussion and analysis to provide perspective for the student's own writing *Prerequisites:* English 112 and junior or senior standing.

A general prerequisite for literature courses numbered 300 and above is the successfu completion of any one of English 221, 222, 241, 242, or 272. Students are urged to consult wit members of the department before enrolling for advanced work.

English 321. English Renaissance Literature. (F)(3
A study of poetry, prose, and non-Shakespearean drama, beginning in the early sixteent century and ending with Milton. (Odd years only.)

English 322. Restoration and Eighteenth Century Literature. (S)(3
Prose and poetry of the neo-classical age, beginning with Dryden and his contemporarie and extending through Samuel Johnson. (Odd years only.)

English 325. British Drama in the Twentieth Century. (F)(3
Modern issues and modern society as shown in works of the modern British theatre an the contribution of typical writers both to the theatre and to society. (Even years only.)

English 331. English Romantic Period. (F)(3
The prose and poetry of the first third of the 19th century, emphasizing the work of Words worth, Coleridge, Byron, Shelley, and Keats. (Even years only.)

English 332. Victorian Period. (S)(3
Major poets and prose writers, emphasizing the contributions of such masters as Tennyson, Browning, and Arnold. (Even years only.)

English 351-352. The Novel. (F,S)(3
Historical study of the growth of the novel as a form. The first course includes novels from Defoe through the Brontes; the second begins ca. 1850 and goes through Faulkner. Either course may be taken separately and not necessarily in sequence. (Even years only.)

nglish 355. Children's Literature. (F)(3)
Children's books can entertain, inform, inspire, and challenge adults as well as children. This course surveys a wide variety of fiction and poetry enjoyed by children and suggests ways of evaluating these works as literature.

nglish 361. Modern Poetry. (F)(3)
American and British poetry, with consideration of ways of reading, criticizing, and writing verse in this century. (Odd years only.)

nglish 372. Shakespeare. (S)(3)
A critical approach to selected histories, comedies, and tragedies, focusing on their timeless human, literary and dramatic qualities.

A general prerequisite for 400-level courses is junior standing.

nglish 401. Modern Grammar. (F)(3)
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent developments in generative semantics. Considerable attention will be paid to the possibilities of practical applications of linguistic theory. (Even years only.)

nglish 402. Advanced Composition. (S)(3)
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student. (Even years only.)

nglish 419. Composition for Teachers. (S)(3)
Review of basic elements of composition with regular writing assignments in both expository and argumentative modes. Techniques of marking and evaluation of student papers. Research techniques, a methodology for teaching students to develop a research paper and practical application of the methodology through the assignment of a research paper as an integral part of the course itself. (Odd years only.)

nglish 421. History of the English Language. (F)(3)
A study of the origins and development of the English language from Anglo-Saxon times to the present. (Odd years only.)

nglish 472. Seminar in Literature. (S)(3)
Intensive study of a major writer, group, or literary topic. May be repeated once for credit.

nglish 495. Independent Study. (F,S)(3)
Intensive individual work, under supervision, in some phase of English, American, or world literature, linguistics, or composition not otherwise covered in the curriculum. *Prerequisites:* Twenty-four hours of English above English 111, 112, and permission of the head of the department. May be repeated for credit.

RENCH

The program offers the opportunity to gain some understanding of France and its culture as ell as a basic knowledge of the French language. Students offering more than one entrance nit in French and students transferring from other colleges should consult with the instruc- or before registering for any course in French.

rench 111. Elementary French I. (F)(3)
Basic French grammar, practice in the oral and written language. (Even years only.)

rench 112. Elementary French II. (S)(3)
Continuation of French 111. *Prerequisite:* French 111 or equivalent. (Even years only.)

rench 211. Intermediate French I. (F)(3)
More detailed study of grammatical structure; study of important literary works; individual collateral reading tailored to the student's interests. *Prerequisite:* French 112 or equivalent. (Odd years only.)

rench 212. Intermediate French II (S)(3)
Continuation of French 211. *Prerequisite:* French 211 or equivalent. (Odd years only.)

French 331. French Civilization. (S)
The economic, social, and cultural development of France; French contributions to wor civilization. May not count toward fulfillment of the language requirement. **No knowled of French required.** (Even years only.)

French 495. Independent Study. (F,S)
Intensive independent study of some aspect of French literature or civilization. May b repeated for credit.

GERMAN

The program offers the opportunity to gain some understanding of Germany and its cultu as well as a basic knowledge of the German language. Students offering more than one e trance unit in German and students transferring from other colleges should consult with th instructor before registering for any course in German.

German 111. Elementary German I. (F)(
Basic German grammar; simple reading; practice in the oral and written language.

German 112. Elementary German II. (S)(
Continuation of German 111. *Prerequisite:* German 111 or equivalent.

German 211. Intermediate German I. (F)(
More detailed study of grammatical structure; reading of important literary works; in dividual collateral reading tailored to the student's interests. *Prerequisite:* German 112 o equivalent.

German 212. Intermediate German II. (S)(
Continuation of German 211. *Prerequisite:* German 211 or equivalent.

German 331. German Civilization. (S)(
The economic, social, and cultural development of Germany; German contributions t world civilization. May not count as part of the language requirement. **No knowledge o German required.** (Odd years only.)

German 495. Independent Study. (F,S)(
Intensive independent study of some aspect of German literature or civilization. May b repeated for credit.

II. DEPARTMENT OF MUSIC AND FINE ARTS

Joe E. Tarry, *Department Head*
Art—Drama and Speech—Music

ART

Union College course offerings in the field of art provide service courses for several cu ricula and opportunities for exploration and growth in artistic self-expression.

Art 132. Introduction to Art. (S)(
An introduction to Art outlining basic approaches, principles, techniques and media a well as styles of expression, both past and present.

Art 271. Elementary School Art. (F)(
A studio course involving many kinds of art projects in media suitable to and practicabl for elementary grades.

Art 373. Art History. (on demand)(
The intensive study of major movements, personalities, and styles of architecture, pain ing, and sculpture of world art.

Art 495. Independent Study in Art. (F,S)(
Independent study or research on approved topics. May be repeated for credit.

RAMA AND SPEECH

Requirements for a Major: Union College offers a comprehensive major with two options. udents may either fulfill the requirements for teacher certification in Drama/Speech or ajor in Drama. Other than the Speech courses required for the first option, there is very little fference between the two.

Core courses required for the major include Drama 251, 352, 331, 332, 365, 366, and 451: a tal of twenty-one semester hours.

Students electing the Drama/Speech option are also required to take twelve hours in proved courses in Speech, including Speech 131, and three hours of upper division dramatic erature courses.

Students electing the Drama option are also required to take six hours of upper division amatic literature courses and Drama 461.

Requirements for a Minor in Drama and Speech: Twenty-one semester hours, including rama 251, 331, 332, 365, 366 and Speech 131, 231. Cannot be used for a teaching minor cer- icate.

Requirements for a Minor in Drama: Twenty-one semester hours in Drama, including Drama 1, 331 or 332, 365, 366. Can be used for teacher certification.

rama 131. Introduction to the Theatre. (F)(3)
Basic principles underlying the origin and development of theatrical presentation. Brief study of elements of production.

rama 151, 152, 153, 154. Theatre Practicum. (F,S)(1)
Actual practical experience in major college theatrical productions in the areas of acting, directing, and production work.

rama 251. Fundamentals of Acting. (F)(3)
Theory and practice behind analysis and presentation of a role. (Even years only.)

rama 321. European Drama since 1945. (F)(3)
A study of representative plays in translation by modern writers from Germany, France, Italy and Poland. (Odd years only.)

rama 331. Play Production. (F)(3)
Study and practice in theatrical design and stage lighting. *Prerequisite for non-majors/minors:* Drama 131 or permission of instructor. (Odd years only.)

rama 332. Play Production. (S)(3)
Study and practice in theatrical costuming and make-up. *Prerequisite for non-majors/minors:* Drama 131 or permission of instructor. (Odd years only.)

rama 352. Advanced Acting. (S)(3)
Scene study and period styles of acting. *Prerequisite:* Drama 251 or permission of instructor. (Odd years only.)

rama 365. History of the Theatre. (F)(3)
Study of theatrical presentation from the Golden Age of Greece to Ibsen. *Prerequisite:* Junior or Senior standing or permission. (Even years only.)

rama 366. History of Modern Theatre. (S)(3)
Study of theatrical presentation from Ibsen to present. *Prerequisite:* Junior or Senior standing or permission. (Even years only.)

rama 451. Directing. (S)(3)
Study and analysis of scripts for production and of production techniques. Staging of one-act play required. *Prerequisite:* Permission of instructor.

rama 461. Senior Project in Drama/Theatre. (on demand)(3)
A supervised project involving advanced work in some area of Drama or Theatre: criticism, history, directing, design, etc. Open only to students majoring in Drama.

rama 495. Independent Study in Drama. (F,S)(3)
Independent study or research on approved topics. May be repeated for credit.

peech 131. Fundamentals of Speech. (S)(3)
Study and practice in the basic elements of speech applicable in daily life, such as voice, articulation, pronunciation, bodily activity, speech organization, outlining and research.

peech 231. Interpretative Reading. (F)(3)
Analysis and oral interpretation of the various forms of literature. Special emphasis on developing qualities for interpretation of character, emotion, and artistic impersonation.

Speech 341. Debate. (S)
The study and practice of formal debate. Case preparation and methods of argumentati using the national college debate topic for the year. Designed to help students think mo clearly, organize their ideas more effectively, and present their conclusions more pe suasively. (Even years only.)

Speech 342. Persuasion. (F)
This course serves to acquaint students with the theory and practice of persuasive tec nique; students will develop their own powers of persuasion and learn to recognize th rhetorical techniques employed by others. (Odd years only.)

MUSIC

Objectives:

1. To provide the required curricula for the Bachelor of Arts and the Bachelor of Science in Music, the Bachelor of Music in Church Music, the Bachelor of Music in Music Education.
2. To offer group and private instruction which provide for the development of the individual musicianship of the music major and music minor.
3. To offer opportunities for participation in music ensembles and music theatre for the music majors, music minors, and general college students.
4. To provide recitals, concerts, and music theatre for the cultural enrichment of the campus and community.

Music Library. The music library, located in the Fine Arts Building, contains records, scores and listening facilities.

DEGREES

Students majoring in music at Union College may pursue the following degree programs:
Bachelor of Music in Music Education
Bachelor of Music in Church Music
Bachelor of Arts in Music
Bachelor of Science in Music
Bachelor of Science in Music and Business

Bachelor of Music in Music Education (K-12 Certificate)

Candidates for the Bachelor of Music in Music Education will take the following courses:

Option I, Instrumental Emphasis		**Option II, Vocal Emphasis**	
MUSC 161-162 Foundations of Music	8	MUSC 161-162 Foundations of Music	8

(Part of general studies for music majors; prerequisite to admittance to the major in music education.)

I. Music Core

MUSC 261-262 Harmony	6	MUSC 261-262 Harmony	6
MUSC 361-362 Form and Analysis	4	MUSC 361-362 Form and Analysis	4
MUSC 321-322 Music History	6	MUSC 321-322 Music History	6
MUSC 111-411 Applied Music	7	MUSC 111-411 Applied Music	7
MUSC 152, 153, 155, 156, 157, 158 Music Ensembles	8	MUSC 152, 153, 155, 156, 157, 158 Music Ensembles	8
MUSC 263-264 Sight-Singing and Ear-Training	2	MUSC 263-264 Sight-Singing and Ear-Training	2
MUSC 173-174 Class Piano	2	MUSC 173-174 Class Piano	2
MUSC 417 Senior Recital	1	MUSC 417 Senior Recital	1
		MUSC 475 Pedagogy-Vocal	2
	36		38

Professional Courses

JSC 271 Music in the Public Schools	2	MUSC 271 Music in the Public Schools	2
JSC 373 Elementary School Music	3	MUSC 373 Elementary School Music	3
JSC 375 Instrumental Methods and Materials	2	MUSC 374 Vocal Methods for the Secondary School	3
JSC 471 Marching Band Techniques	2	EDUC 365 Foundations of Educ. for the Exceptional Child	3
)UC 365 Foundations of Educ. for the Exceptional Child	3	EDUC 241 Intro. to Education	3
)UC 241 Intro. to Education	3	EDUC 351 Human Growth and Development	3
)UC 351 Human Growth and Development	3	PSYH 361 Psychology of Learning	3
;YH 361 Psychology of Learning	3	EDUC 453 Supervised Student Teaching	12
)UC 453 Supervised Student Teaching	12		
	33		32

Additional Courses Required for the Bachelor of Music in Music Education

JSC 171 String Instruments Class	1	MUSC 365 Arranging	2
JSC 172 Woodwind Instruments Class	1	MUSC 473 Conducting, Choral	2
JSC 175 Brass Instruments Class	1		4
JSC 176 Percussion Class	1	Total	74
JSC 365 Arranging	2		
JSC 474 Conducting, Instrumental	2	Two hours of Class Voice	
	8	Two hours of Private Voice for Keyboard Majors	4
Total	77	Total	78

Bachelor of Music in Church Music

ındidates for the Bachelor of Music in Church Music will take the following courses:

I. Music Core

MUSC 161-162	Foundations of Music	8
MUSC 261-262	Harmony	6
MUSC 361-362	Form and Analysis	4
MUSC 321-322	Music History	6
MUSC 111-411	Applied Music	8
MUSC 152, 153 155, 156 157, 158	Music Ensembles	8
MUSC 263-264	Sight-Singing & Ear-Training	2
MUSC 173-174	Class Piano	2
MUSC 417	Senior Recital	1
		44

II. Church Music and Professional Courses

MUSC 333	Church Music Administration	2
MUSC 335	Hymnology	2
MUSC 337	Church Organs	2
MUSC 373	Elementary School Music	3
MUSC 374	Vocal Methods for the Secondary School	3
MUSC 436	History and Philosophy of Church Music	3
MUSC 437	Church Music Practicum	4
		19

III. Additional Courses Required for the Bachelor of Music in Church Music

MUSC 171, 172 175, 176	Instrument Techniques	4
MUSC 473	Choral Conducting	2
MUSC 474	Instrumental Conducting	2
MUSC 461-462	Counterpoint	4
	Private Piano or Organ (for voice principals only; 2 hrs. of which may be Class Piano) or Private Voice (for instrumental principals; 2 hrs. of which may be Class Voice)	4
		16

IV. Courses in Religion

RLGN 111	Old Testament History, Literature, and Interpretation	3
RLGN 112	New Testament History, Literature, and Interpretation	3
RLGN 222	Administration and Education in the Local Church	3
RLGN 355	World Religions	3
		12

V. General Studies Requirements 39

Total 130

Bachelor of Arts and Bachelor of Science in Music

Candidates for the Bachelor of Arts or Bachelor of Science Degree in Music will take t following music courses (see also general studies requirements and graduati requirements).

I. Academic Emphasis

MUSC 161-162 Foundations of Music	8
MUSC 261-262 Harmony	6
MUSC 361-362 Form & Analysis	4
MUSC 321-322 Music History	6
MUSC 421-422 Music History Seminar	6
Applied Music	8
Ensemble	0
Music Elective	2
	40

II. Applied Emphasis

MUSC 161-162 Foundations of Music
MUSC 261-262 Harmony
MUSC 361-362 Form & Analysis
MUSC 321-322 Music History

Applied Music
Ensemble

Bachelor of Science in Music and Business

Candidates for the Degree of Bachelor of Science in Music and Business will take the follo ing courses:

I. Business Core

BUAD 321 Principles of Marketing	3
BUAD 351 Principles of Finance	3
BUAD 352 Principles of Management	3
BUAD 311 or 312 Business Law	3
ACTG 271-272 Accounting	6
COMP 131 Intro. to Computer Info. Systems	3
ECON 153-154 Principles of Economics	6
	27

II. Music Requirements

MUSC 161-162 Foundations of Music
MUSC 261-262 Harmony
MUSC 111-412 Applied Music
MUSC 322 Music History
MUSC 171, 172, 173, 175 String, Woodwind, Pianc and Brass classes (choose any 3)

Additional Business Requirements

JAD 272 Salesmanship	3
FAD 302 Business Communications	3
pper Division Business Elective	3
eld Placement	3-10
	12-19

Minor in Music

Twenty-one semester hours, including: Music 161-162; three semester hours selected from ther Music 321 or 322; two semester hours of music electives; two years of ensemble; and mpletion of the 202-level of course numbering in one field of applied music, or eight hours of plied music arranged differently with the consent of the department.

DEPARTMENTAL REQUIREMENTS

Specific requirements for music majors and minors are listed in the Music Department andbook. Students will be held responsible for requirements in the Handbook. More detailed formation is given for the following:

Entrance Test: All music majors and minors entering the Department for the first time shall take a placement test in theory and functional piano. The test is for placement only, and in no way affects the entrance to music study.

Piano Proficiency: All candidates for the Bachelor of Music in Music Education and the Bachelor of Music in Church Music must demonstrate proficiency as required for Music 202, Applied Music Secondary, Piano.

Ensemble Requirements: All music majors are required to participate in a minimum of seven semesters in one ensemble and two semesters in another ensemble. All music minors are required to participate in a minimum of four semester hours in the ensemble of their performance major.

Recital and Concert Attendance: Attendance at departmental recitals and concerts is required of all music majors and of all music minors during each semester of applied music study.

Recital Requirements: Candidates for the Bachelor of Music degree must present a full recital on their major instrument or in voice. Candidates for the Bachelor of Arts or Bachelor of Science degree in Music may be invited to present a recital by the music faculty.

PPLIED MUSIC—SECONDARY LEVEL

These courses are designed for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor, a major with an academic emphasis, any music major taking lessons on a secondary instrument, and elective credit.

usic 101-102. Applied Music. **(F,S)(1-2)**
Freshman level secondary applied music study.

usic 201-202. Applied Music. **(F,S)(1-2)**
Sophomore level secondary applied music study.

usic 301-302. Applied Music. **(F,S)(1-2)**
Junior level secondary applied music study.

usic 401-402. Applied Music. **(F,S)(1-2)**
Senior level secondary applied music study.

PPLIED MUSIC—MAJOR LEVEL

These courses are designed for students enrolled in Music and Business and for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor, applied emphasis, and for the Bachelor of Music in Church Music or Music Education.

usic 111-112. Applied Music. **(F,S)(1-2)**
Freshman major or minor level applied music study.

usic 211-212. Applied Music. **(F,S)(1-2)**
Sophomore major or minor level applied music study.

Music 311-312. Applied Music. (F,S)(1)
Junior major level applied music study.

Music 317. Junior Recital. (F,S)(0)

Music 411-412. Applied Music. (F,S)(1)
Senior major level applied music study.

Music 415-416. Applied Field Literature. (on demand)
A study of the literature for the student's major instrument, and related instruments whe appropriate, with attention to stylistic characteristics and ornamentation.

Music 317. Senior Recital. (F,S)(0)

Music 418-419. Sight-Reading and Accompanying. (on demand)
Proficiency in reading the various clefs, vocal scores, and accompaniments, with e phasis on the techniques of sensitive accompanying. Keyboard majors and select minors only.

HISTORY AND APPRECIATION

Music 121. Introduction to Music. (F)
An historical approach to music appreciation focusing on period and style. Extensi listening to music literature. Not open to music majors or minors.

Music 122. Introduction to the History of American Popular Music. (S)
An historical approach involving the study of styles and personalities beginning with t origins of jazz and ending with current trends and concepts. Open to all students.

Music 321, 322. Music History. (F,S)
A study of representative music both written and recorded, and readings coordinating a integrating music skills. (321) Antiquity through 1600. (322) Baroque period to the preser

Music 421-422. Music History Seminar. (on demand)
Intensive study of a selected period or genre. Major paper required. *Prerequisite:* Mus 321, 322.

CHURCH MUSIC

Music 333. Church Music Administration. (F)
The role of the minister of music as related to the graded adult, youth, and children's ch programs, budget and calendar planning, the congregation, the multiple staff church, a the denomination.

Music 335. Hymnology. (S)
The study and analysis of the hymns of the church, their sources, development, and usa in contemporary service.

Music 337. Church Organs. (F)
The study of the history of the instrument, types of organs, basic upkeep, techniques, a service repertoire.

Music 436. History and Philosophy of Church Music. (S)
A detailed, historical study of music within the church relating to its origin and develo ment, with emphasis upon liturgies and historic philosophical positions of the church music.

Music 437. Church Music Practicum. (on demand)
One semester or one summer of supervised field work in an approved church. *Prerequisit* Consent of the Music faculty.

ENSEMBLES

Music 152. Union College Singers. (F,S)(0-
Open by audition only; performs in chapel, Christmas concert, Spring concert, graduatio tours, and festivals. Limited to forty-nine students; four rehearsals per week. May b repeated for credit.

Music 153. Stage Band. (F,S)(0-
Open by audition only. A jazz-oriented ensemble of appropriate instrumentation limited t twenty students. Two rehearsals per week. May be repeated for credit.

Music 155. Brass Chamber Ensemble. (on demand)(0-1)
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 156. Collegium Musicum. (on demand)(0-1)
Open to interested students. A performance group intended to give the student acquaintance with less frequently performed literature. One rehearsal per week. May be repeated for credit.

Music 157. Woodwind Chamber Ensemble. (on demand)(0-1)
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 158. String Chamber Ensemble. (on demand)(0-1)
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

THEORY

Music 161-162. Foundations of Music. (F,S)(4)
A combined course in the areas of music theory, history, and literature. Five periods per week.

Music 261-262. Harmony. (F,S)(3)
Continuation of Music 161-162 in the area of part-writing and analysis. Advanced chromatic harmony of the middle Romantic period. Three periods per week. *Prerequisite:* Music 162.

Music 263-264. Ear-Training. (F,S)(1)
Sight-singing, ear-training, and dictation to be taken concurrently with Music 261-262. Two periods per week. *Prerequisite:* Music 162.

Music 361-362. Form and Analysis. (F,S)(2)
The development of musical forms from small units to large. Study of large scale analytic techniques including those necessary for late 19th and early 20th century Music. *Prerequisite:* Music 262.

Music 365. Arranging. (S)(2)
Basic techniques of orchestration and arranging. *Prerequisite:* Music 262.

Music 461-462. Counterpoint. (on demand)(2-2)
The vocal counterpoint of Palestrina and the instrumental counterpoint of Bach. *Prerequisite:* Music 162.

Music 465. Theory Seminar. (on demand)(3)
An advanced course in music theory, including a study of contemporary practices. *Prerequisite:* Music 362, and permission of the instructor.

MUSIC EDUCATION

Music 171. String Instruments Class. (F)(1)
Class instruction in strings.

Music 172. Woodwind Instruments Class. (S)(1)
Class instruction in woodwinds.

Music 173-174. Piano Class. (F,S)(1)
Class instruction in piano.

Music 175. Brass Instruments Class. (F)(1)
Class instruction in brass.

Music 176. Percussion Instruments Class. (S)(1)
Class instruction in percussion.

Music 177-178. Voice Class. (F,S)(1)
Class study for students who are not prepared to study at the level of private applied voice.

Music 271. Music in the Public School. (F)(2)
Fundamentals of public school education with special emphasis on the philosophy and foundations of music education and the position of music within the entire curriculum. Includes directed observation of and participation in public school classroom activities.

Music 373. Elementary School Music. (S)(3)
Methods and Materials in the elementary school. Will include fundamental ability at the keyboard, the fundamentals of music, and library research. Includes directed observation of and participation in public school classroom activities for music majors.

Music 374. Vocal Methods for the Secondary School. (F)(3)
Materials, rehearsal techniques, and vocal health for the secondary school student. Includes directed observation of and participation in public school classroom activities. *Prerequisite:* Junior standing as a music major.

Music 375. Instrumental Methods and Materials. (S)(2)
Teaching Instrumental Music in the Junior and Senior High School: Procedures, techniques, curriculum, scheduling, administration, evaluation, materials, equipment, and community relations. Includes directed observation of and participation in public school classroom activities.

Music 471. Marching Band Techniques. (F)(2)
Functions, organization, and direction of a school marching band.

Music 473. Choral Conducting. (F)(2)
Techniques and literature.

Music 474. Instrumental Conducting. (S)(2)
Techniques and literature.

Music 475. Pedagogy. (on demand)(2)
Techniques and principles of private and class instruction, emphasis on recommended materials.

INDEPENDENT STUDY

Music 495. Independent Study. (F,S)(2-3)
Independent study and/or research on approved topics. *Prerequisite:* permission of the student's major professor. May be repeated for credit.

III. DEPARTMENT OF RELIGION AND PHILOSOPHY

Robert D. Matthews, *Department Head*
Christian Education—Religion—Philosophy

Courses in this Department are designed to acquaint the student with the Judaeo-Christian tradition and the other great religious traditions of mankind and with the great traditions and disciplines of human thought; to deepen his awareness of himself and of the human community; to cultivate his powers of critical examination and the meaning and direction of human existence.

Studies in religion are especially recommended for students of art, history, and literature, and for students preparing for Christian vocations.

Studies in philosophy are especially recommended for pre-professional education for such vocations as the Christian ministry, college teaching, law, journalism, creative writing, and art, as well as for students of history, literature, and the sciences.

Pre-ministerial preparation. The American Association of Theological Schools has stated that the college work of students planning to enter the ministry should result in at least the following: 1. Ability to speak and write English clearly and correctly, to think clearly, and to read at least one foreign language; 2. Acquaintance with the world of men and ideas, the world of nature, and the world of human affairs; and 3. A sense of achievement through the mastery of fields of study and through honors work or other independent study. The student is expected to become well grounded in English, philosophy, and history, and to gain some background in social studies (especially psychology and sociology), the natural sciences, languages, and religion.

CHRISTIAN EDUCATION

In recognition of increasing demand for trained young men and women as full-time Christian workers in the unordained ministry of the local church, to serve in the capacities of pastor's assistant, director of youth work, or Director of Christian Education, a specific four-year course of study has been arranged, using the facilities of various departments. It is designed to meet the basic needs of students who wish to go directly into church positions without graduate work.

A 24-hour major is recommended in Religion, including Religion 222, plus courses in music, drama, and Appalachian studies. A second major or minor in drama or music is often helpful. The following three courses should supplement the major:

Speech 131. Fundamentals of Speech
Physical Education 321. Recreational Leadership
Psychology 402. Counseling Theories and Techniques

RELIGION

Requirements for a Major: The twenty-four hour major, recommended for Christian Education and pre-ministerial students, must include courses 111, 112 and 311, plus Philosophy 261. The thirty-hour major may include Philosophy 371.

Requirements for a Minor: Twenty-one semester hours, at least nine of which must be in courses numbered above 300.

Religion 101. Conference Studies. **(on demand)(0)**
A study of books required by the Methodist Church for the local preacher's license. Required of all recipients of ministerial loan-grants who have not yet obtained the license to preach.

Religion 111. Old Testament History, Literature, and Interpretation. **(F)(3)**
The history of Israel from the earliest times to the Maccabean Age. Historical and literary criticism and religious significance of the emergence of Judaism.

Religion 112. New Testament History, Literature, and Interpretation. **(S)(3)**
Attention to author, date, origin, historical and religious significance. Religion 111 recommended.

Religion 121. Primitive Religions. **(F)(3)**
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies. (Odd years only.) Students may not take both Religion 121 and 321.

Religion 127. Archaeology and the Old Testament. **(S)(3)**
Archaeological discoveries related to the Old Testament era. Students may not take both Religion 127 and 327.

Religion 201-202. Elementary New Testament Greek. **(F,S)(3)**
A semi-inductive approach to koine Greek, recommended for persons interested in religion as well as for religion majors.

Religion 212. Old Testament Prophets. **(F)(3)**
The nature of prophecy and the prophetic movement in Israel from its beginning with Moses to its close with the book of Jonah. (Even years only.)

Religion 222. Administration and Education in the Local Church. **(S)(3)**
Administrative responsibilities of the Director of Christian Education as related to the pastor, local church governing body, and the congregation. Theory and practice of Christian Education with special attention to planning a year's program in the local church.

Religion 231. The Life and Teachings of Jesus. **(S)(3)**
The world into which Jesus was born and an interpretation of his messianic consciousness, personality, activities, and teachings. Religion 112 recommended. (Even years only.)

Religion 241. The Life and Teachings of Paul. **(F)(3)**
The world of Paul, his life, teachings, and significance, using his letters as the primary source. Religion 112 recommended. (Even years only.)

Religion 301-302. Elementary Old Testament Hebrew. **(F,S)(3)**
A study of sufficient grammar to read simple Old Testament passages, recommended for persons interested in religion as well as for religion majors.

Religion 311. Introduction to Christian Thought. (S)(3)
Examination of traditional and contemporary understanding of the Christian faith, with emphasis on the nature of God and of man; the significance of Christ and the Church; the relation of religion to morality; the meaning of Creation and Redemption; and the interpretation of Human Destiny. *Prerequisite:* Religion 112. (Even years only.)

Religion 321. Primitive Religions. (F)(3)
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies and examination of anthropological and psychological explanatory theories. (Odd years only.) Students may not take both Religion 121 and 321.

Religion 327. Archaeology and the Bible. (S)(3)
Archaeological discoveries related to the Old and New Testament eras, supplemented by wide reading in books, magazines and newspapers, and class reports, color slides and movies. Students may not take both Religion 127 and 327.

Religion 353. Church History. (on demand)(3)
The origin and development of the Christian Church from its beginning through the Reformation.

Religion 355. World Religions. (S)(3)
A descriptive account of the faith and practices of present-day world religions, with emphasis on Hinduism, Buddhism, Confucianism, Islam.

Religion 479. Seminar in Religion. (on demand)(3)
Intensive study on a special subject with oral and written reports. Possible topics include: The Fourth Gospel, Apocalyptic Literature, Pauline Theology, Wisdom Literature, The Apostolic Period. *Prerequisite:* Advanced standing and permission of the instructor.

Religion 495. Independent Study. (F,S)(3)
Independent study or research on approved topics. May be repeated for credit.

PHILOSOPHY

Requirements for a Minor: Twenty-one semester hours.

Philosophy 151. Introduction to Philosophy. (F,S)(3)
Both a study of the nature of philosophy, its aims, problems, and methods, and an exercise in philosophizing in which the student clarifies constructively and evaluates critically his own and other understandings of life.

Philosophy 202. Logic. (S)(3)
Cultivation of rational acuity through an examination of the procedures and limits of rational discourse. (Odd years only.)

Philosophy 261. Philosophy of Religion. (F)(3)
An introduction to basic modern concepts, issues, and methods in the philosophical examination of religion. (Odd years only.)

Philosophy 371. Ethics. (F)(3)
Cultivation of reasoning in moral decision-making through an examination of traditional ethical theories, contemporary moral issues and the structure of moral decision.

Philosophy 376. History of Western Philosophy I: Ancient and Medieval. (on demand)(3)
Philosophical thinking in its cultural context, from its birth through the classical and medieval eras.

Philosophy 377. History of Western Philosophy II: Modern. (on demand)(3)
The rise and development of modern thought-forms through the nineteenth century.

Philosophy 378. History of Western Philosophy III: Contemporary. (on demand)(3)
Twentieth century western thinking and its nineteenth century backgrounds, with particular reference to modern idealism, phenomenology, existentialism, pragmatism and the analytical movement. *Prerequisite:* any philosophy course.

Philosophy 479. Seminar in Philosophy. (on demand)(3)
Intensive study of a special topic such as Epistemology, Metaphysics, Plato, Kant. Permission of instructor required.

Philosophy 495. Independent Study. (F,S)(3)
Independent study or research on approved topics. May be repeated for credit.

Division of Natural Sciences

Santaram Chilukuri, *Chairman**
Francis E. Nussbaum, *Acting Division Chairman*
Biology—Chemistry—Environmental Studies
General Science—Mathematics—Physics
Coal Mining Technology

PRE-PROFESSIONAL PROGRAMS

Since professional schools vary considerably in their admission requirements, the student is advised to select the professional school he wishes to attend later, and then choose pre-professional courses accordingly. The science faculty should be consulted before registration in order to assist the student in preparing a course schedule. For details of a specific program, the following faculty members should be consulted.

Dentistry—Nussbaum
Engineering—Chilukuri
Medical Technology—Rosen
Medicine—Nussbaum
Optometry—Nussbaum
Pharmacy—Khatri
Physical Therapy—Rosen
Veterinary Medicine—Nussbaum

PHYSICAL THERAPIST ASSISTANT PROGRAM

Union College and Jefferson Community College, in Louisville, Kentucky, have entered into an agreement whereby a person from southeastern Kentucky may work toward an Associate of Applied Science degree and qualify to be a Physical Therapist Assistant. The program is a two-year program. The student will take courses at Union College during the first year and complete the program at Jefferson Community College during the second year.

This program prepares a person to become a skilled assistant working under the supervision of a licensed physical therapist. Upon graduation, physical therapist assistants may seek positions in hospitals, extended care facilities, rehabilitation clinics, and in mental retardation and mental illness institutions.

To qualify for graduation from this program, a student must also present a Red Cross First Aid Certificate earned within the last four years. Students who enter this program will be asked to state in writing their intent to return to southeastern Kentucky to work as physical therapist assistants.

Further information may be obtained from the appropriate faculty person (see above) or the Office of Academic Affairs.

DEGREE IN MEDICAL TECHNOLOGY

Union College has cooperative agreements with University of Louisville and The Methodist Hospital of Kentucky, Pikeville, in which the student attends Union College for three years and, upon acceptance, enters the cooperating institution and receives clinical training in medical technology for twelve months. On satisfactory completion of the program the student is awarded a bachelor's degree in medical technology and should be qualified for a national certifying examination.

*On leave 1984-85.

COMBINED DEGREE IN ENGINEERING

A cooperative "Three-Two Plan" has been worked out with the University of Kentucky and Auburn University in which the student attends Union College for three years pursuing certain pre-engineering courses in addition to a solid program in liberal arts. At the end of the three years, upon the recommendation of Union College, he enters the cooperating university or any accredited engineering school as a junior and in two additional years completes all the requirements for the B.S. degree in Engineering. Both the B.A. or B.S. from Union College and a B.S. in Engineering from the cooperating university are awarded at the end of the fifth year.

COMBINED DEGREES IN HEALTH SCIENCES

Students may elect a Bachelor's degree in pre-professional studies at Union College or may arrange for transfer to accredited medical, dental, veterinary medicine, optometry, or medical technology schools for their professional work after three years. On completion of the professional studies, they will also be awarded their Bachelor's degree from Union College. (See the section on Combined Degrees.)

SCIENCE EDUCATION MAJORS (SPECIALIZATION FOR HIGH SCHOOL CERTIFICATION)

The following Areas of Concentration are acceptable for the requirements for the specialization component of the Provisional High School Certificate.

1. AREA IN MATHEMATICS-PHYSICAL SCIENCE
   The requirements are a total of 48 semester hours with 15 semester hours of chemistry; 15 semester hours of physics numbered 211 and above, including laboratory; 15 semester hours of mathematics numbered 241 and above; 3 semester hours of electives chosen from chemistry courses and physics courses numbered 211 and above, or mathematics courses numbered 241 and above. At least 18 semester hours must be in courses numbered 300 and above. See Department of Education for professional requirements.
2. AREA IN SCIENCE
   The requirements are a total of 48 semester hours with 12 semester hours of biology; 12 semester hours of chemistry; 12 semester hours of physics courses numbered 211 and above, including laboratory; environmental studies 350; 9 semester hours of electives chosen from biology, chemistry, or physics courses numbered 211 and above. At least 21 semester hours must be in either biology, chemistry, or physics. At least 18 semester hours must be in courses numbered 300 and above. See Department of Education for professional requirements.

BIOLOGY

Requirements for a Major: Thirty semester hours in Biology are required. Biology 111, 232, 233, 361, 441, and 452 must be included. Required science cognates consist of Math 111 and 211; Chemistry 111-112, and 131-132; Physics 101, 110, and 112; General Science 471. Recommended science cognates consist of Math 241; Chemistry 212, and 311-312; Physics 211-212, and 213-214 in place of the required physics courses at the 100 level.

Requirements for a Minor: Twenty-one semester hours in Biology are required. Biology 111, 232, and 233 must be included.

Biology 111. Introduction to Biology. **(F,S,Sum)(4)**
A course emphasizing general concepts of modern biology for majors and non-majors. Topics surveyed include cell biology, bioenergetics, molecular and Mendelian genetics, reproduction, development, evolution, and ecology. Human relevance is stressed. Laboratory work is included. This course is a prerequisite to all other courses in biology.

Biology 151. Medical Terminology. **(F)(2)**
The study of the specialized terminology of medical science. Recommended for pre-professional students, biology majors, allied health students, and students in other health-related fields. This course does not meet the biological science requirement for teacher education. *Pre- or corequisite:* Biology 111 except in specific associate degree programs where this is not required.

Biology 232. General Zoology. (S)(4)
A survey of the animal kingdom with emphasis on animal diversity, evolution, and environmental relationships. Additional topics include energy metabolism, taxonomy, reproduction, population phenomena, behavior and sociobiology.

Biology 233. General Botany. (F)(4)
A survey of the plant kingdom from the blue-green algae through the flowering plants. Emphasis is given to morphology and to evolutionary relationships. Appropriate discussions of plant physiology, plant taxonomy, and human economic importance are included.

Biology 234. Microbiology. (S)(4)
An introduction to the classification, morphology, physiology, and genetics of the bacteria, fungi, viruses, and micrometazoans, and their roles in nature, health, and industry. Laboratory work stresses techniques for the culture and identification of microorganisms. A portion of the course is devoted to immunology.

Biology 315. Vertebrate Biology. (4)
The anatomy, physiology, taxonomy, ecology, behavior, and evolution of the vertebrate phyla with emphasis on the species endemic to southeastern Kentucky.

Biology 321. Field Biology. (3)
Field investigations including observation, collection, and identification of local fauna and flora are offered under discrete course headings including: Limnology, Ornithology, Entomology, Local Flora, Dendrology, and Mycology. Pertinent field data is collected and analyzed appropriately.

Biology 330. Anatomy. (F)(3)
A study of the tissues, organs, and organ systems of vertebrates with emphasis on the human body in health-related sciences.

Biology 331. Human Physiology. (S)(4)
A study of the functioning of the human organ systems with normal and clinical considerations.

Biology 350. Parasitology. (F)(4)
An intense study of protozoan and metazoan parasites with an emphasis on morphology, life cycles, pathology and control. The laboratory component emphasizes methods used to 1) necropsy host animals 2) prepare parasites for identification and 3) analyze host pathology by employing histological techniques. A slide collection of various parasites is required. *Prerequisites:* Biology 111 and Biology 232.

Biology 361. Genetics. (F)(4)
A study of the principles of inheritance including Mendelian, population, and cytogenetics. *Prerequisite:* Math 111.

Biology 441. Ecology. (4)
A study of the relationships between organisms and their abiotic and biotic environment including biogeochemical cycles, population dynamics, diversity, and pollution of terrestrial and aquatic ecosystems. *Prerequisites:* Biology 232 and 233. Completion of Biology 361 is recommended.

Biology 452. Cell Biology. (4)
A sophisticated treatment of the structure, biochemistry, and functioning of life at the cellular level. Emphasis is given to bioenergetics, enzyme kinetics, molecular genetics, immunology, and organelle physiology. *Prerequisites:* Math 111, Chemistry 112, and sixteen hours in biology. Prior completion of physics and organic chemistry is recommended.

Biology 495. Independent Study and Research. (F,S)(1-3)
An introduction to the methods of science through original research. For advanced students who have demonstrated potential for performing an independent investigation of a substantive problem. The problem is chosen and carried out in collaboration with the instructor. A typewritten report in publication style is required.

CHEMISTRY

Requirements for a Major: Thirty semester hours of Chemistry including Chemistry 111, 112, 131, 132, 212, 311, 312, and 342. Science cognates consist of Physics 211, 212, 213, 214, 311, Mathematics 111, 241, 242; and General Science 471.

Requirements for a Minor: Twenty-one semester hours which should include Chemistry 111, 112, 131 and 132, 311 and 312.

Chemistry 111-112. General Chemistry. (F,S)(3)
A systematic study of the fundamentals and applications of the experimental and theoretical laws of chemistry. Major topics include nomenclature, stoichiometry, chemical thermodynamics, equilibrium, acid-base reactions, atomic and molecular theory and structure, chemical kinetics and nuclear chemistry. Examples and problems are drawn from all areas of chemistry. Concurrent registration in General Chemistry Laboratory, Chemistry 131-132, is highly recommended for all students. *Prerequisite:* Math 111 which may be taken concurrently.

Chemistry 131-132. General Chemistry Laboratory. (F,S)(1)
Laboratory experiments in general chemistry that illustrate basic principles and develop laboratory skills. Experiments are coordinated with the General Chemistry topics. In organic qualitative analysis is included in Chemistry 132. Three hours of laboratory per week. Concurrent registration or previous completion of Chemistry 111-112 is required. No credit may be received for Chemistry Laboratory 131-132 without the simultaneous or prior completion of the corresponding lecture courses Chemistry 111-112.

Chemistry 212. Quantitative Analysis. (F)(4)
A study of important volumetric and gravimetric analyses presented from a modern theoretical standpoint. Also an introduction to the study of advanced methods of analysis including some newer instrumentation techniques. *Prerequisite:* Chemistry 112, 132.

Chemistry 311-312. Organic Chemistry. (F,S)(4)
A course in the chemistry of organic compounds. Unitized laboratory work is designed to illustrate the basic principles of organic chemistry. *Prerequisites:* Chemistry 112 and 132.

Chemistry 342. Physical Chemistry. (S)(4)
A study of atomic structures and chemical bonding in terms of modern quantum theory. Topics include molecular spectra, physical methods of investigation and chemical kinetics. *Prerequisites:* Math 242 and Physics 212. (Even years only.)

Chemistry 411. Inorganic Chemistry. (F)(4)
A systematic study of the structure, properties and reactions of non-carbon elements, with emphasis on the non-metals and the transition metals. Topics include atomic-molecular structure and bonding, physical methods of investigation, organometallic chemistry and bioinorganic chemistry. *Prerequisite:* Chemistry 312. (Odd years only.)

Chemistry 495. Special Problems. (F,S)(3)
This is an introduction to the methods of scientific research. The course is designed for the advanced student who has demonstrated ability to do independent work in Chemistry. It will consist of a particular problem decided upon after consultation with the instructor. Upon conclusion of the work a typewritten and bound report-thesis may be required. An examination may or may not be given, depending on the nature of the problem.

ENVIRONMENTAL STUDIES

Requirements for a Minor: Twenty-four hours, to be chosen by the student, the student's major advisor, and an advisor from the Environmental Studies Program. Courses are also listed under the various departments to which they relate. The required core: Environmental Studies 100, Biology 111, Economics 251 or Sociology 251 and Environmental Studies 313. The remainder of the courses are to be chosen from other Environmental Studies courses or the following recommended electives: Biology 315, 321, 441; Geography 241; Mathematics 125; Philosophy 371; Sociology 311, 371, 421 and certain experimental courses.

Environmental Studies 100. Man and His Environment. (S)(4)
A multi-disciplinary course in which basic ecological principles are developed and used to show human impact on natural eco-systems. Topics include endangered species, impact of population growth, land use and management problems, food production and demands.

Environmental Studies 110. Physical Systems of the Environment. (F)(3)
A study of the physical environment as the home of man. Emphasis on distribution and interaction of environmental variables (weather, landforms, vegetation, soils, and climate). This course may be used to fulfill the physical science requirement for students seeking teacher certification.

Environmental Studies 113. Geology of Coal. (S)(3)
Introduction to Physical Geology, with an emphasis on the geology of coal; environmental problems and energy needs will be explored.

Environmental Studies 244. Reclamation and Land Use. (S)(3)
A detailed study of how surface mining affects the natural environment and the processes used to reclaim the land and restore it to a natural and/or useful state. *Prerequisite:* Coal Tech. 242.

Environmental Studies 313. Environmental Policy. (F)(3)
A study of the decision-making processes and the consequences of alternative courses of action on environmental quality. Analyzes the impact of public opinion, the various branches of government and pressure groups on environmental/energy policies at the federal and state levels. *Prerequisites:* Environmental Studies 100 and an introductory political science course, or permission of instructor. (Odd years only.)

Environmental Studies 350. Man's Geologic Environment. (S)(4)
Significance of regional and local geological features and processes in land use planning. Use of geological information to reduce conflicts in utilization of mineral and water resources and damage due to natural hazards. *Prerequisites:* Environmental Studies 110 or Environmental Studies 113. (Odd years only.)

Environmental Studies 469. The Appalachian Environment. (Sum)(3)
Conservation of natural resources including soil, water, wildlife and forests as interrelated components of the environment. Current problems relating to the environmental quality of the Appalachian region. *Prerequisites:* Two courses in environmental studies or biology and an introductory economics course.

Environmental Studies 487. Field Practicum in Environmental Studies.

GENERAL SCIENCE

Neither a major nor a minor is offered.

Gen. Science 114. Introduction to Astronomy. (S)(4)
An introduction to the elements of astronomy. Constellation identification, telescope operation, properties of the moon and planets, solar features, stars, galaxies, and cosmology.

Gen. Science 401. Science: Concepts, Processes and Inquiry. (S)(3)
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, experimenting, etc. With the laboratory materials from the new science program he will explore their use in teaching children these processes. As materials from such programs as ESS, SSIS IME, IIS, ISCS, PSSC, PHYSICS, CHEMS, etc., are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching science will be stressed along with individualized instruction, learning theory, laboratory equipment use (commercial and home-made) and multimedia instruction. Natural science credit for education majors only.

Gen. Science 471. Science Seminar. (S)(1)
A lecture/discussion of selected topics of interest, led by faculty members of the Division of Natural Sciences, invited speakers, and student participants. May be repeated once; a student can earn a maximum of two credit hours through this course. All natural science majors must take this course at least once. *Prerequisite:* Natural science major with Junior or Senior standing, or permission of the instructor.

MATHEMATICS

Requirements for a Major: Thirty semester hours consisting of mathematics courses numbered 241 and above; Physics 211, 212, 213, and 214.

Requirements for a Minor: Twenty-one semester hours consisting of mathematics courses numbered 241 and above, and including Mathematics 241 and 242.

Mathematics 100. Elements of Mathematics. (F,S)(3)
This course is intended for students who need to improve their arithmetic and elementary algebra skills prior to taking other mathematics courses or courses requiring quantitative reasoning. The course includes a brief review of whole number arithmetic (particularly prime factorization, exponents, and perfect squares), an extensive review of fractions, decimals, ratio and proportion, percent, and an introduction to algebra (including arithmetic of integers, algebraic expressions, and linear equations).

Mathematics 108. Intermediate Algebra. (F)(3)
This course is intended for students with a weak background in high school algebra who want to know more about the subject and/or plan to take Mathematics III, College Algebra and Trigonometry. The course includes a review of the real number system (particularly integers and irrational numbers), operations with polynomials, operations with algebraic fractions, simplification of radical expressions, solutions of equations and inequalities (linear, quadratic, higher order, and simultaneous), and an introduction to graphs and functions. *Prerequisite:* Successful performance on entrance exam covering arithmetic and elementary algebra (given on first day of class).

Mathematics 111. College Algebra and Trigonometry. (F,S)(4)
Brief review of intermediate algebra including expressions, equations, and inequalities; graphs of relations; functions as a special type of relation; graphs of functions; systematic graphing, combining functions and finding inverses; exponential and logarithmic functions; solving simultaneous equations using matrix methods; right triangle trigonometry; general trigonometry; trigonometric functions, their graphs and inverses; trigonometric identities and equations; the Binomial Theorem and mathematical induction.

Mathematics 125. Graphic Analysis. (F)(3)
Basic map reading for geologic and topographic maps, scaled drawings, use of planimeter, excavation sections, coal tonnage estimation, methods and procedures of three-dimensional modeling from topographic maps as a basis of engineering calculations.

Mathematics 203-204. Structure of the Number System. (F,S)(3)
Historical development of the numeration system from an intuitive to a logical approach based upon set theory, definitions of the basic operations on whole numbers and their properties extended to integers, rationals, and irrationals; study of why and how of algorithms for all operations; topics in informal geometry.

Mathematics 211. Basic Statistics. (S)(3)
Basic concepts of descriptive and inferential statistics. Illustrations of applications in the fields of education, business, sociology, psychology, and natural science. *Prerequisite:* high-school algebra or permission of the instructor.

Mathematics 232. Surveying. (S)(3)
Principles, calculations, and field practice in surveying, measuring distances and elevations, stadia method, map reading, land areas, care and use of instruments. *Prerequisite:* Mathematics 108 or equivalent, or permission of the instructor.

Mathematics 241. Intro. to Calculus and Analytic Geometry. (S)(4)
Inequalities, the straight line, conic sections, limits, the derivative, differentiation of algebraic functions, applications of the derivative, extrema, and the antiderivative. *Prerequisite:* Mathematics 111 or permission of instructor.

Mathematics 242. Intermediate Calculus and Analytic Geometry. (F)(4)
The integral, applications of the integral, logarithmic and exponential functions, trigonometric functions, hyperbolic functions, techniques of integration, L'Hospital's Rule and indeterminate forms, and improper integrals. *Prerequisite:* Mathematics 241.

Mathematics 243. Advanced Calculus and Analytic Geometry. (S)(4)
Topics selected from polar coordinates, vectors, solid analytic geometry, partial differentiation, multiple integration, infinite series, and differential equations. *Prerequisite:* Mathematics 242.

Mathematics 331. Introduction to Linear Algebra. (F)(3)
Vector algebra in Euclidean spaces, lines and planes in space, matrices and linear equations, groups, and rings. *Prerequisite:* Math 111 and the permission of the instructor. (Odd years only.)

Mathematics 332. Linear Algebra. (S)(3)
Vector spaces, subspaces, linear independence, linear transformations, determinants, inner product spaces, orthogonality, and unitary transformations. *Prerequisite:* Mathematics 331. (Odd years only.)

Mathematics 372. Probability and Mathematical Statistics. (F)(3)
Theoretical probability using point set approach, probability as a frequency ratio; probability for finite sample spaces; conditional probability; joint and continuous distributions, binominal distribution; Baye's theorem; statistical applications of probability; theory of sampling and variance. *Prerequisite:* Mathematics 242, which may be taken concurrently, and permission of the instructor. (Even years only.)

Mathematics 402. Functions of a Complex Variable. (on demand)(S)(3)
Complex numbers, analytic functions, elementary functions of a complex variable, Cauchy's formula, Liouville's theorem, Laurent's series, residues, contour integration, conformal mapping, physical applications. (Even years only.)

Mathematics 403. Introduction to Analysis. (on demand)(F)(3)
Sets and functions, topological ideas, LUB property, real sequences, continuity, mean value theorems, integration, definite integrals, Taylor's theorems, improper integrals, convergence of infinite series, power series, improper integrals with parameter. (Even years only.)

Mathematics 471. Differential Equations. (S)(3)
Differential equations of first order and first degree, differential equations of first order and higher degree, differential operators and linear differential equations, reduction of order. *Prerequisite:* Mathematics 242. (Even years only.)

Mathematics 495. Independent Study. (F,S)(3)
Independent work on topics selected to meet the student's needs. For Mathematics majors only.

PHYSICS

Requirements for a Major: Thirty semester hours consisting of physics courses numbered 211 and above, including Physics 211, 212, 213, and 214. Science cognates consist of Chemistry 111, 112, 131, 132, and General Science 471.

Requirements for a Minor: Twenty-one semester hours of physics courses numbered 211 and above, including Physics 211, 212, 213, and 214.

Physics 101. Survey of Physics. (F)(3)
A descriptive introduction to physics covering some of the ideas of modern physics. Scientific theories, speed of light, energy, wave motion, heat engines, electromagnetic spectrum, nuclear energy, beyond the solar system.

Physics 103. Survey of Physics Laboratory. (F)(1)
Experiments and activities that illustrate basic principles of physics and develop laboratory skills. Experiments are coordinated with Physics 101.

Physics 110. Fundamentals of Physics. (S)(3)
Mechanics of motion and equilibrium; properties of solids, liquids and gases; thermal phenomena; wave motion; electricity and magnetism; optics, topics in modern physics. *Prerequisite:* Mathematics 111, which may be taken concurrently.

Physics 112. Fundamentals of Physics Laboratory. (S)(1)
Laboratory experiments in physics that illustrate basic principles and develop laboratory skills. Experiments are coordinated with Physics 110.

Physics 211-212. General Physics. (F,S)(4)
Mechanics of solids, liquids and gases; laws of thermodynamics; kinetic-molecular theory, vibrating bodies; wave physics; laws of Coulomb, Faraday, Ampere, Ohm, Joule, and Lenz; electromagnetism; optics; photoelectric and Compton effects; nuclear energy; relativistic effects. *Prerequisite:* Mathematics 241.

Physics 213-214. General Physics Laboratory. **(F,S)(1)**
A general physics laboratory course involving experiments in mechanics, heat, sound, electricity, magnetism, optics and modern physics. Experiments are coordinated with Physics 211-212.

Physics 301. Principles of Modern Physics. **(F)(3)**
Special relativity, elementary concepts of quantum mechanics, selected topics in atomic and nuclear physics. *Prerequisites:* Physics 212 and Mathematics 242.

Physics 310. Statics. **(S)(3)**
Study of force systems on bodies at rest. Applications of conditions of equilibrium to coplanar and space systems. Virtual work, centroids, moments of inertia, and products of inertia. *Prerequisite:* Physics 211.

Physics 311. Heat and Thermodynamics. **(F)(4)**
Thermodynamic systems and processes, equations of state, PVT surfaces of real substances, laws of thermodynamics, energy equations, enthalpy, entropy, and thermodynamic potentials, applications of thermodynamics to simple systems, kinetic theory. *Prerequisites:* Physics 212, and Mathematics 242.

Physics 312. Electricity and Magnetism. **(on demand)(4)**
Electric charges, forces, field and potential with associated magnetic forces and fields; dielectric theory; capacitance, inductance, resonance, oscillations; series, parallel DC and AC circuits; measuring instruments; Maxwell's equations and electromagnetic waves. *Prerequisite:* Physics 212.

Physics 411. Dynamics. **(on demand)(3)**
Motion of a particle, systems of particles, rigid bodies; moving coordinate systems; Lagrange's equations; small oscillations. *Prerequisites:* Physics 212 and Mathematics 242.

Physics 412. Physical Optics. **(on demand)(4)**
Wave propagation and superposition; interference, diffraction, absorption, dispersion, polarization, double refraction, interaction of radiation with matter, laser theory; theory of selected optical instruments. *Prerequisite:* Physics 212.

Physics 495. Independent Study. **(F,S)(3)**

COAL MINING TECHNOLOGY

Union College offers 3 programs in Coal Technology.

I. Associate of Applied Science (AAS) - a 2-year program

II. A minor in Coal Mining Technology

III. A major in Mining Management - a 4-year program

The Coal Mining Technology Program is designed to provide the technical skills and knowledge that will qualify students for jobs or enable them to advance their careers in coal mining and related industries.

The Coal Mining Technology curriculum was developed in part by an advisory board of mining industry representatives. Their input ensures that the Union College Coal Mining Technology Program meets the needs of the coal industry and that students who graduate from the program will have the training they need for jobs in the coal industry.

I. Requirements for the 2-year AAS degree.

A. Common courses required of all candidates — Semester hours

COAL	111	Introduction to Coal Mining	3
COAL	112	First Aid and Safety	3
COAL	121	Mining Law	3
ENVS	113	Geology of Coal	3
MATH	125	Graphic Analysis	3
MATH	232	Surveying	3
COAL	220	Mining Economics	3
COAL	235	Coal and Water Analysis	3
COAL	246	Dust, Noise and Illumination	3
BUAD	352	Principles of Management	3

ENGL	111	English Composition	3
ENGL	112	English Composition	3
MATH	108	Algebra, Intermediate	3
		Humanities Elective	3
		Social Science Elective	3
			45

B. Emphasis Courses

Underground Mining - 15 hours or **Surface Mining** - 15 hours

Required:

COAL	240	Fundamentals of Roof Control	3
COAL	241	Mine Gases & Ventilation	3
COAL	245	Underground Mining Methods	3

Required

COAL	242	Surface Mining Methods	3
COAL	243	Explosives & Blasting	3
ENVS	244	Reclamation & Land Use	3

Electives:

COAL	248	Coal Preparation	3
COAL	232	Mine Electricity	3
COAL	258	Field Experience*	3

C. Free Electives - 6 hours

Grand Total - 66 hours

Experienced students may substitute other courses from the Emphasis List.

I. **Requirements for a Minor in Coal Mining Technology:** Union College also offers a minor in Coal Mining Technology as part of a four-year Bachelor of Science degree program. It enables students in business, science, the health professions, and other fields to take courses that will complement their chosen professions and better prepare them for careers in the coal industry or in allied fields.

Requirements consist of twenty-one semester hours in Coal Mining Technology, including Coal Technology 111, 112, 121, or 122, and Mathematics 125. The remaining nine semester hours should be selected in consultation with the student's advisor so as to meet his or her career goals.

II. **Requirements for the mining management major.**

A. Completion of the requirements for the AAS in Coal Technology

B. Completion of the general studies requirements

C. Completion of the following 30 hour major:

COAL 220	Mining Economics	BUAD 311 or 312	Business Law
COMP	A computer language	BUAD 321	Principles of Marketing
ECON 251	Environmental Economics	or	
ACTG 271	Principles of Accounting	BUAD 351	Principles of Finance
ACTG 272	Principles of Accounting	BUAD 352	Principles of Management
OFAD 302	Business Communications	BUAD 372	Personnel Management

Coal Tech. 111. Introduction to Coal Mining. (F)(3)
Principles and practices of surface and underground mining, methods, equipment, field trips, miner responsibilities, safety practices. (Part I of training for inexperienced miners—surface and underground.)

Coal Tech. 112. First Aid and Safety. (F)(3)
Instruction in MSHA approved first-aid procedures for all types of accidents, CPR training, and principles of accident prevention. (Part II of training for inexperienced miners—surface and underground.)

Coal Tech. 121. Mining Law. (S)(3)
A study of underground and surface mining laws and their relationship to mine manage ment and operation. MSHA Health & Safety Regulation.

Coal Tech. 220. Mine Economics. (S)(3)
Introduction to the operational cost of mining (surface and underground) in the followin areas: Engineering, equipment, taxes, fees, royalties, transportation, office managemen MSHA, OSM, preparation plant, and coal market.

Coal Tech. 232. Mine Electricity. (F)(3)
D.C. and A.C. theory and applications, motors, transformers, power equipment, circuits and circuit protections, control circuits, diagrams and equipment trouble shooting, an basic solid state. *Prerequisites:* Mathematics 108 or permission of instructor.

Coal Tech. 235. Coal and Water Analysis. (S)(3)
A study of the chemical properties of coal and water, and an introduction to analytical prin ciples, sampling methods, and statistical treatment of data used in coal and wate laboratories. *Prerequisite:* Mathematics 108 or consent of instructor.

Coal Tech. 240. Fundamentals of Roof Control. (F)(3)
A study of stress factors on roofs, types of roof bolts, machinery, types of mine roofs testing and controlling roofs, and roof control plans.

Coal Tech. 241. Mine Gases and Ventilation. (F)(3)
Mine Gases: Physical and chemical properties of mine gases, effect on miners, gas detec tion devices, and safety procedures. Ventilation: Methods, ventilation devices, required ai movement, ventilation plans, and effect on mine gases.

Coal Tech. 242. Surface Mining Methods. (F)(3)
A study of the principles and practices of surface mining. Topics: Surface mining methods matching method to topography, equipment, and mining regulations.

Coal Tech. 243. Explosives and Blasting. (F)(3)
Methods of using explosives and the latest techniques in blasting for both surface and underground. Safety and economy will be emphasized. *Prerequisite:* Mathematics 100 or equivalent, or consent of instructor.

Coal Tech. 245. Underground Mining Methods. (S)(3)
A detailed study of the methods of underground mining: matching equipment to mining situations, mine designs for safety and efficiency, coal seams—locations and physical and chemical properties, new technology. *Prerequisite:* Coal Tech. 240 or 241.

Coal Tech. 246. Dust, Noise, and Illumination. (S)(3)
A study of dust, noise, and illumination problems in a mining situation. The following will be discussed under each category: history of regulations, reasons for health standards, physical properties, instruments and methods of use.

Coal Tech. 248. Coal Preparation. (F)(3)
A study of the various aspects and methods of coal preparation including sampling, washing, crushing, the science of separation processes such as dense-media and froth flotation, refuse removal and disposal.

Coal Tech. 285. Field Experience in Coal Technology. (F,S,Sum)(3)
A directed field experience in some phase of coal mining with consideration given to the needs and interests of the student. Students with prior experience may elect to substitute 2 Coal Technology emphasis courses, with permission of the director. *Prerequisite:* Coal Tech. 111 and 112 or equivalent and 15 hours credit.

Division of Social Sciences

John C. Taylor, *Chairman*
Behavioral Sciences—Psychology—Sociology
History—Political Science—Geography—Appalachian Studies
Appalachian Semester

BEHAVIORAL SCIENCES

The two departmental courses listed below are "core" courses in the Behavioral Sciences curriculum. Both courses are required as a part of the Psychology and Sociology majors and minors.

Behavioral Sciences 245. Basic Statistics: Theory and Application. (S)(3)
Basic concepts of descriptive and inferential statistics. Illustrations of applications in the fields of sociology, psychology, business, education, and natural science.

Behavioral Sciences 341. Methods of Behavioral Sciences Research. (F)(3)
Techniques of behavioral sciences research, including survey design and the collection, analysis, and interpretation of data. Lecture and laboratory.

PSYCHOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, 361, 452 and 460.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, and 361.

Psychology 111. Introduction to Psychology. (F,S)(3)
Emphasis on the study of human behavior and the ability of the individual to make adjustments to his environment.

Psychology 210. Child Development. (S)(3)
Emphasis on recent child development theories with laboratory experiences with children on a one-to-one basis.

Psychology 361. Psychology of Learning. (F)(3)
Basic concepts and principles of learning with emphasis upon human and animal laboratory studies.

Psychology 402. Counseling Theories and Techniques. (F)(3)
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing. Permission of the instructor required.

Psychology 411. Educational Psychology. (F)(3)
Basic concepts related to mental development, appraisal and diagnosis, and learning theory applicable to educational practices.

Psychology 430. Social Psychology. (S)(3)
Major emphasis is on problems involved in human relations. Designed to help the individual to understand and adjust to group thought and action. Attention is given to recent psychological and sociological research in human relations.

Psychology 431. Mental Hygiene. (on demand)(3)
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustment.

Psychology 452. Abnormal Psychology. (S)(3)
Mental disorder, changing conceptions of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

Psychology 460. Theories of Personality. (F)(3)
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological and stimulus-response theories included.

Psychology 461. History and Systems of Psychology. (on demand)(3)
Origins of psychological thought within science and philosophy, tracing the development of systems and theories within German, British, and American psychology.

Psychology 470. Theories of Learning (S)(3)
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

Psychology 495. Independent Study. (F,S,Sum)(1-3)

SOCIOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Sociology 131, 460. Psychology 430 is strongly recommended and will be credited toward the thirty semester hour requirement.

Requirements for a Minor: Twenty-one semester hours, including Behavioral Sciences 245, 341, Sociology 131. Psychology 430 is strongly recommended and will be credited toward the twenty-one semester hour requirement.

Sociology 131. Introduction to Sociology. **(S)(3)**
The social interaction of persons and groups; man's cultural heritage and social nature; analysis and principles of group life; forms of collective behavior; the process of socialization; social structure, interaction and reorganization, including race relations and social class; a variety of social institutions; the family, education, religion; the economy and politics; social change. Students taking this course cannot also receive credit for Sociology 141.

Sociology 141. Introduction to the Sociology of Appalachia. **(F)(3)**
Introduces students to the basic tenets of Sociology using Appalachia as the sociologic base. The areas of study include socio-economic class, culture, folklore, social institutions, the family, religion, schooling, poverty, development and unionization of Appalachia. Students taking this course cannot also receive credit for Sociology 131.

Sociology 221. Introduction to Anthropology. **(on demand)(3)**
A survey of the archaeological and biological history of mankind as it relates to the development of man in his culture, with comparisons drawn between the cultures of primitive people and Western Civilization.

Sociology 251. Current Socio-Economic Problems. **(F)(3)**
Scientific understanding of social problems; problem areas in contemporary American society; types of personal disorders and role impairment; the influences of social change on the structure of society. Attention is also given to the question of why certain forms of deviance become defined as social problems.

Sociology 255. Selected Topics in Political Sociology. **(on demand) (3)**
A series of seminars and small group discussions organized around a set of case readings in the area.

Sociology 271. Marriage and the Family. **(S)(3)**
Background experiences in the lives of young people leading up to courtship and marriage; the establishment and functioning of the home, with related biological and social factors. Emphasis upon changing attitudes toward family relationships, some of the problems involved, and suggested solutions.

Sociology 311. Human Ecology. **(S)(3)**
Population distribution, growth, composition, and its relevance to current economic, social, and political problems. (Odd years only.)

Sociology 345. Appalachian Semester Orientation Seminar. **(F,S)(3)**
An introduction to Appalachian culture. Open only to students participating in the Appalachian Semester.

Sociology 349. Economics of Appalachian Poverty. **(F,S)(3)**
A theoretical and empirical study of the economics of poverty in southern Appalachia with special emphasis on the major economics bases; including an examination of pertinent historical and geographic characteristics. Open only to students participating in the Appalachian Semester.

Sociology 353. Minority Groups. **(on demand)(3)**
A social scientific study of the origin and organization of minorities and their effect on society, with particular emphasis on minorities in the United States.

Sociology 371. Social Institutions. **(F)(3)**
An examination of the structure and function of social institutions, with primary orientation within the American milieu. Particular emphasis on socialization, stratification, social change, and relations among institutions. (Odd years only.)

Sociology 421. Rural and Urban Sociology. **(F)(3)**
Comparative and interrelated study of urban and rural life considering physical, institutional, social and economic factors of modern life in cities and in the countryside.

Sociology 422. Social Institutions in Appalachia. **(F,S)(3)**
A theoretical and empirical analysis of the cultural and social characteristics of the Appalachian Region from an institutional point of view. Open only to students participating in the Appalachian Semester.

Sociology 433. Social Change. (F)(3)
This course introduces students to the problems of development and change. Examples will be drawn from Third World models of development, nationalism, imperialism, environmentalism, and human rights. The course is interdisciplinary, with emphasis on historical, economic, environmental and sociological aspects.

Sociology 435. Labor Relations in Appalachia. (on demand)(3)
The restricted focus of this seminar will be an analysis in historical and contemporary perspectives of labor relations in central and southern Appalachia. While some attention will be given to various industries including chemicals, clothing, furniture, brick-making, and iron-making, emphasis will center upon work relations in coal and textile communities.

Sociology 460. Sociological Theory. (F)(3)
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

Sociology 464. Sociology of Deviance. (S)(3)
This course will develop an understanding of the social definitions and implications of deviance. Various types of deviant behavior and relevant theories of society will be addressed.

Sociology 495. Independent Study. (on demand)(1-3)

PRE-LAW

Most law school admissions committees require a student to have a four-year college program leading to the Bachelor of Arts or Bachelor of Science degree plus an acceptable score on the Law School Admissions Test. Majors may be in any area although most students tend to take business or social science majors of some type. Students may also elect an individualized major (See Special Programs Section) to prepare themselves for law school. Regardless of the major, elective hours in accounting, business, history, political science, philosophy, and English prove helpful.

HISTORY

Requirements for a Major: Thirty hours of history including History 130, 131 and 200. At least 12 hours must be U.S. History and 12 hours must be non-U.S. History.

Requirements for a Minor: 21 semester hours in history; including History 130 and 131. At least 9 hours must be in U.S. History and 9 in non-U.S. History.

History 101. United States History to 1865. (F)(3)
A survey of American history through the Civil War, tracing the development of the American nation. Stress is placed on the nature of Colonial society; the American Revolution; the creation of a national government; the influence of Jackson, and the Civil War.

History 102. United States History since 1865. (S)(3)
A survey of American history to present times tracing the rise of America as a world power. Emphasis is on the changes of industrialization; the loss of civil rights; protest and reform; the Depression; and American influence in the world.

History 130. Survey of Western Civilization: Ancient through Medieval. (F)(3)

History 131. Survey of Western Civilization: Renaissance to Present. (S)(3)

History 200. Historical Research and Methods. (F)(3)
Gathering and criticism of data; bibliographies and aids; problems in historiography, composition analysis, and the final monograph. History majors should take this course in their sophomore year.

History 233. History of Appalachia. (Sum,F)(3)
A survey of the region from settlement to the present time. The course focuses especially on the impact of the frontier experience, the Civil War and industrialization. "How is Appalachia both similar to and different from the rest of America?" is a major question addressed by the course.

History 241. American Economic History. (S)(3)
Examination of the economic forces shaping the development of the American Nation. Topical consideration of mercantilism; the rise of capitalism; slavery; the shocks of industrialization; the New Deal; and criticism of American economic power and capitalism. (Even years only.)

History 311. United States Colonial and Revolutionary Eras (1600-1815). (F)(3)
An examination of the conflicting historical interpretations of these eras. Topics emphasized will be Puritanism; Colonial society; reasons for the Revolution; the meaning of the Constitution; and the nation's early problems. (Odd years only.)

History 312. Jacksonian Era & the Civil War (1815-1865). (S)(3)
Emphasis on the conflicting historical interpretations of Jacksonian America and the Civil War. Topics include the Second Political Party System; slavery; expansion; and the causes of the Civil War. (Odd years only.)

History 313. Industrial America (1865-1919). (F)(3)
A consideration of the conflicting historical interpretations of the period. Topics emphasized include the loss of Civil Rights; the nature of the Gilded Age; Populist and Progressive Reforms; and World War I. (Even years only.)

History 323. Latin America. (on demand)(3)
A survey of Latin American history from the discoveries by Columbus to the present with the major emphasis on Mexico and the Caribbean.

History 330. Renaissance and Reformation: Europe (1350-1648). (F)(3)
An examination of historical transition from feudalism to primitive capitalism, from political localism to national monarchy, from religious life to secular life. (Even years only.)

History 331. Early Modern Europe (1648-1815). (S)(3)
A theoretical and historical appreciation of the birth, development and implications of the following institutions: mercantilism and merchant capitalism, the birth of the nation-state, the emergence of political democracy, European global expansion and early industrial society. (Even years only.)

History 332. Modern Europe. (S)(3)
Emphasis on the dual revolutions in Europe, industrial and political, and European and global implications: nationalism, socialism, liberalism, and communism.

History 345. American Constitutional History: Civil and Political Rights. (F)(3)
An examination of the influence of the Supreme Court with primary stress given to political and civil rights. Major consideration is the modern and Warren Supreme Court. (Even years only.)

History 421. The Middle Period (1821-1850). (F)(3)
A detailed examination of Jackson, politics, and the culture of the period. Stress is placed on reform and the predominance of change in American life, and conflicting interpretations of the period. (Even years only.)

History 442. Britain in the 20th Century. (S)(3)
Britain in a period of economic decline, de-colonization and the resultant crisis for her domestic institutions: social conflict and the response of labor, communications and the struggle for cultural dominance. (Even years only.)

History 446. History of Russia. (F)(3)
Russian History since 1600. Emphasis on the relation of economic development and social class to royal absolutism, bureaucratic absolutism and the emergence and development of the Soviet State. (Odd years only.)

History 470. Twentieth Century America. (S)(3)
Selected topics on the nation's history since 1900, including the New Deal, Viet Nam, and Watergate. (Odd years only.)

History 495. Independent Study. (F,S,Sum)(3)

POLITICAL SCIENCE

Political Science 110. Critical Issues in American Politics and Government. (F)(3)
A study of selected public policy problems facing Americans in the contemporary political context.

Political Science 211. American National Government. (S)(3)
A study of the structure and function of the national government in theory and practice.

GEOGRAPHY

Geography 101. Introduction to Geography. (S)(3)
Emphasis on the concepts of place, region, spatial interaction, landscape interpretation and landscape evolution. Deals with the graphic media of geography—maps, graphs, scale models. Case studies illustrate geographic principles to familiarize students with various parts of the world. For future teachers as well as students of the natural and social sciences.

Geography 241. Geography of Appalachia. (F)(3)
A systematic analysis of the physical, demographic, economic and cultural characteristics of the Appalachian landscape, with comparative significance for other regions. Includes field study.

APPALACHIAN STUDIES

An interdisciplinary minor in Appalachian Studies is available to interested students. Courses involving the study of Appalachia may be found throughout this catalog.

Requirements for a Minor: Twenty-one semester hours chosen from the following: Behavioral Sciences 341 or History 200; Coal Technology 111; Economics 252; Environmental Studies 313 and 469; Geography 241; History 233; Sociology 141 and 435. Participation in the Appalachian Semester may also be counted toward a minor in Appalachian Studies. Relevant independent study projects and a specialized field practicum are also recommended.

APPALACHIAN SEMESTER

L. James Cox, *Coordinator*

The Appalachian Semester offers mature students a unique educational opportunity to devote their full time to studying the Appalachian region—its strengths, its problems and its challenges. The program's objectives are to promote in-depth awareness and understanding of life in Appalachia from an interdisciplinary approach and to provide an academic setting for understanding and participating in the dynamics of life in the area. This comprehensive academic program, which includes both classroom and field experience, provides 15 semester hours of credit in a variety of disciplines and offers the student the opportunity to become actively involved in a unique part of American society.

The following courses comprise the Appalachian Semester. These courses are open only to students participating in the Appalachian Semester.

Sociology 345. Appalachian Semester Orientation Seminar. (F,S)(3)
An introduction to Appalachian culture.

Sociology 349. Economics of Appalachian Poverty. (F,S)(3)
A theoretical empirical study of the economics of poverty in southern Appalachia with special emphasis on the major economic bases; including an examination of pertinent historical and geographic characteristics.

Sociology 422. Social Institutions in Appalachia. (F,S)(3)
A theoretical and empirical analysis of the culture and social characteristics of the Appalachian Region from an institutional point of view.

Sociology 287-487. Appalachian Field Practicum. (F,S)(6)
The Appalachian Semester student, in consultation with the director, will develop a specialized field experience. May be taken in any approved discipline. Project will be designed to enhance the student's learning experience and make a positive contribution to the lives of people living in Appalachia.

An introductory knowledge of social studies and permission of the director are prerequisites for enrollment in the program. A course in social work methods or in social research methods is highly recommended as a prerequisite for participants desiring upper division field work credit in social work and sociology respectively.

SPECIAL COOPERATIVE NURSING PROGRAM
UNION COLLEGE - BELLARMINE COLLEGE
CURRICULUM FOR B.S.N. PROGRAM

Prior to admission to upper-level program, candidates for the B.S.N. degree must satisfy the following lower-level course requirements.

English Composition	6 semester credit hours
*Natural Science (courses in Biology and/or Chemistry)	15 semester credit hours
Social Sciences (courses in Psychology and Sociology)	9 semester credit hours
Nursing (lower-level studies with an associate degree or diploma)	28 semester credit hours
Total	58 semester credit hours

*Up to 3 semester hours of natural science credit can be waived for an equal number of credits in nutrition.

Students whose prior preparation (R.N.) does not include one or more of the above requirements must be prepared to remedy this deficiency by taking the appropriate courses as determined by their advisor.

GENERAL REQUIREMENTS FOR THE B.S.N. DEGREE PROGRAM:

History of Western Civilization 130, 131	6 semester credit hours
English 221 and 222	6 semester credit hours
Mathematics 211 or Behavioral Sciences 245	3 semester credit hours
Philosophy 151	3 semester credit hours
Theology Elective/Religion 311 (lower or upper level)	3 semester credit hours

SPECIFIC UPPER-LEVEL REQUIREMENTS FOR THE B.S.N. DEGREE PROGRAM:

Nursing courses are to be found in the Bellarmine College catalog. All others are Union College courses.

JUNIOR YEAR

Biology 331	4 credits	Elective	3 credits
Philosophy 371	3 credits	Business Administration 352 or 372	3 credits
Nursing 301	2 credits	Nursing 320	2 credits
Nursing 311	3 credits	Nursing 326	4 credits
Nursing 325	3 credits		
Total	15 credits	Total	12 credits

SENIOR YEAR

Psychology 430	3 credits	Nursing 440	3 credits
Nursing 412	3 credits	Nursing 450	3 credits
Nursing 435	3 credits	Nursing Electives	4 credits
Elective	3 credits	Senior Seminar	3 credits
Total	12 credits	Total	13 credits

CAMPUS INFORMATION

Location, Campus and Buildings

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. Cumberland Gap National Historical Park is thirty miles away. The Doctor Thomas Walker State Shrine is four miles from the campus and in adjoining counties are Cumberland Falls State Park, Levi Jackson State Park, and Pine Mountain State Park.

The county seat of Knox County, Barbourville is served by Greyhound buses enroute to Knoxville, Lexington, Louisville, and Cincinnati. The London-Corbin Airport, approximately thirty miles from the campus, is served by the Piedmont Airlines.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Speed Hall, (Administration Building), 1897-1905. A gift from the estate of Mrs. Fanny Speed of Louisville, Ky. Her bequest also partially financed Centennial Hall and Stevenson Hall.

Centennial Hall, (formerly the Classroom Building), 1907.

Stevenson Hall, Men's Dormitory, 1907; wings added 1957.

Dramatic Arts Center, (formerly Soldiers' and Sailors' Memorial Gymnasium), 1919; remodeled 1965.

Baldwin Place, the home of the President, 1925. The gift of Mr. and Mrs. F.E. Baldwin, Elmira, N.Y.

Maintenance Building, 1938, originally equipped by a gift from the estate of Robert Norton, New Albany, Indiana.

Abigail E. Weeks Memorial Library, 1941, originally furnished by a gift from Mrs. Abbie E. Stewart.

Pfeiffer Hall, Women's Dormitory, 1942; wing added 1960. The original wing was a gift from the estate of Mr. and Mrs. Henry Pfeiffer, of New York City.

Conway Boatman Chapel and Fine Arts Building, 1949.

College Courts, residences for married students, 1954; expanded in 1964.

Religious Life Center, 1975.

Physical Education Building, 1964, including the Swimming Pool, 1957.

Student Center, 1964.

College Park, 1960, faculty residential area.

Langford Apartments, 1962. Gifts from the estates of Miss Mary Kyle Dugan and Mrs. Mary Gilbert Langford in memory of Mr. and Mrs. George Langford. Housing for faculty and staff.

Mahlon Miller Science Center, 1973.

Publications

Union College Bulletin—An official quarterly bulletin, one issue of which is the catalog number. The bulletin is sent free on request.

Parents' Bulletin—A publication to inform parents of activities on campus.

Orange and Black—A newspaper published by the student body.

Union College Alumnus—A bulletin published by the Alumni office.

Stespean—The yearbook, published annually by the students of the college.

Student Organizations

Students have the opportunity of participating in and developing leadership through a number of campus organizations. Some of these are departmental, some are limited to honor students in their fields, many are open to all interested students. Each has a faculty sponsor and some include faculty in their membership. The following are official clubs and organizations as approved by the faculty of Union College.

Alpha Psi Omega—A national honorary theatre fraternity. Union's Zeta Chi chapter serves to encourage participation in the college's theatrical activities and to develop larger and better informed theatre audiences.

Appalachian Wilderness Club—A group to explore the outdoors through hiking, camping, and caving.

Association of Women Students—An organization to enable residents to participate in decisions involving dorm life.

Beta Chi Alpha—A cultural society, in the form of a sorority, which attempts to bring beauty, culture, and art to the campus.

Circle-K International—A service fraternity associated with Kiwanis.

Fellowship of Christian Athletes—An organization designed to promote athletic involvement and spiritual growth.

Gamma Beta Phi—A national honor society promoting scholarship, leadership, and good citizenship at Union College.

Iota Mu Gamma—An organization to benefit the College by promoting services, fellowship and unity.

Iota Sigma Nu—An honor society to provide recognition for honor students by uniting them in an organization which encourages high ideals, promotes diligence in study, and rewards excellence in scholarship.

Modern Culture Study Group—A group whose purpose is to study modern culture with an emphasis on the dramatic arts, through group discussion, films, readings, and lectures.

Mu Omega Beta—A fraternity promoting fellowship, unity, and service to the college community.

Oxford Club—An organization to provide a fellowship of service and study for Christian students of Union College, and to provide opportunities for those students to put their faith into action.

The Paw Pack—The primary purposes of this organization shall be: to encourage school spirit; to increase campus participation in Union College athletic events; and to create a spirit of unity among students, faculty, administration and staff.

Phi Beta Lambda—A national business organization promoting scholastic achievement, service to the community, development of leadership potential, social interaction, and increased awareness of the business world.

Student Center Board—A board to plan programs for social and recreational activities to supplement those planned by other campus agencies.

Student National Education Association—A national pre-professional organization for men and women planning to pursue teaching as a career.

Union College Science Society—An organization to stimulate interest in the natural sciences.

Union College Service Organization—An organization sponsored by Campus Ministry and supported by The Fellheimer Trust, which encourages and coordinates volunteer service on the campus and in the surrounding communities by students, faculty and staff.

Athletics

Union College is a member of the Kentucky Intercollegiate Athletic Conference (KIAC) and of the National Association of Intercollegiate Athletics (NAIA). The College promotes athletics for physical development and as a vital part of the program of extracurricular activities. The program emphasizes the protection of the best interests of the student athlete. Union teams are noted for "clean" sport and competitive spirit. Sport for fun and character building is fundamental. In intercollegiate competition the College is represented by varsity teams in football, basketball, swimming, tennis, baseball, soccer and softball.

Women may participate on intercollegiate teams in swimming and tennis, and have earned places on varsity teams in these sports in recent years. Separate women's teams are active in basketball and softball and compete against women's teams from other colleges and universities in the area.

Union College sponsors intramural activities in touch football, basketball, free-throwing, badminton, softball, tennis and volleyball to have a "sports for all" program. The intramural organization is, in general, made up of men's and women's independent teams. The program includes both team and individual sports. No college credit is given for intramurals, but everyone is urged to take part.

Student Conduct

Each student is expected to conduct himself at all times according to the rules of good society. This obligation includes compliance with Federal, State and local laws and adherence to college regulations. As members of a free society, students are always free to peacefully and lawfully petition for amendment or modification of the various laws as well as the college regulations. However, the rights of the student body as a whole and the College as an institution of higher education supersede the rights of any individual student or any group of students. Accordingly, not in an attempt to stifle dissent, but rather to perpetuate an environment where the student may peacefully pursue his studies, actions which are disruptive to the normal functions and operations of the College will not be tolerated. Students who are disorderly in conduct, or unmindful of the rights of others, may be required to withdraw from the College.

No student shall possess or use alcoholic beverages when on college property or when away from the campus representing the

College in any way; i.e., as a participant or spectator at a College athletic event or other college function. Any student violating this regulation may be required to withdraw from the College.

The sale, possession, or use of drugs or substances in violation of the Federal, State, or local laws is prohibited. Any student who illegally sells, possesses, or uses such drugs will be subject to criminal prosecution by the appropriate law enforcement agencies and also may be suspended or expelled. It is the announced policy of Union College to cooperate fully with the various law enforcement officials in the enforcement of the drug laws as with all other laws. A student's lawful use and possession of certain drugs prescribed by a qualified medical practitioner such as a physician, dentist, or optometrist is, of course, permitted.

Firearms of any kind are forbidden in the residence halls or on the campus. Students may be expelled for failure to abide by this rule.

Gambling in any form is strictly forbidden.

Union College expects good housekeeping from all on-campus resident students. Residents who fail to keep their rooms in satisfactory condition will have their housing contract revoked. The College reserves the right to enter and inspect the rooms of students at any time.

The Student Code defining procedures for dealing with academic dishonesty is found in the student handbook.

Social Life

Students are encouraged to accept every legitimate opportunity to engage in social functions. The faculty emphasizes the value of well-directed social activities. Student organizations, the faculty, and local churches make desirable contributions to the promotion of social life. The Director of Student Activities is responsible for the initiation and direction of a comprehensive program of student social and recreational activities. All social functions are subject to the rules and regulations of the College.

Automobiles

Automobiles parked on campus must be registered in the Business Office. All must display a legible parking permit sticker. The annual registration fee is $5.00. Stickers should be displayed on the rear bumper of the car on the driver's side. Cars should be parked in the assigned lots as designated by the Traffic Control Officer. Violation of parking regulations may result in vehicles being ticketed or towed away at owner's expense. Parking for the handicapped is provided.

Health Service

Union College students receive health service and advice from the County Health Office in Barbourville. Since the College does not have facilities for taking care of protracted illness, arrangements for hospitalization must be made by the student or his parents. When a physician is needed the student may request the dormitory counselor to call one, whose fee is paid by the student. In case of emergency, the College reserves the right to employ a physician or to have a student hospitalized without consent of the parents. All full-time students are encouraged to secure coverage of an accident, sickness, and hospitalization plan if adequate insurance is not available through a family plan at home. All claims under student insurance plans are filed by the student and the attending physician and not by Union College.

Campus Housing

Stevenson Hall for men and Pfeiffer Hall for women permit single or double room occupancy. Twenty apartments are available for married students. All residents of Stevenson Hall, Pfeiffer Hall, and College Courts are required to sign housing contracts. Residents in the dormitories are required to purchase meal tickets for the college cafeteria.

Students are expected to obey the terms of their housing contract. A copy of this contract can be obtained in the office of the Dean of Students.

The dormitories are closed during vacation periods as specified in the academic calendar. Students will not be allowed to remain in the dormitories during vacation. Students will be required to turn in their keys during these stated vacation periods. Anyone failing to do so will be charged a lost key fee. The Dean of Students assists students who must remain in Barbourville for full-time work-study or student teaching in finding suitable off-campus housing.

No student will be issued a room key, hallway, or outside door key unless he or she has previously signed a housing contract. Keys must be returned by the last day of the terms of this agreement or of the student's use of the accommodations, whichever occurs first. Any student failing to return a

oom key and/or apartment key will be charged a ten dollar ($10.00) fee. A twenty-five ollar ($25.00) fee will be charged for loss of allway or outside door key to cover the cost f changing the lock for the security of persons subsequently permitted the use of the ccommodations.

ibrary and Learning esource Center

he Abigail E. Weeks Memorial Library ouses a collection of approximately 80,000 olumes. More than 350 periodicals are egularly received, along with indexing serices to facilitate their use. The Library is lso a selective depository for U.S. governnent publications. The stacks are open for se by all students. Regulations governing he use of library materials are available in he Library, and freshmen students are iven instruction in the use of library acilities. In addition, the College's library ollections include a special Lincoln Civil War collection containing over 1,000 olumes, a curriculum library for the Departnent of Education, and a music library with a collection of more than 3,500 recordings nd musical scores.

The Learning Resource Center supplements the printed materials of the ibrary with a broad range of non-print nedia, including slides, audiotapes, ideotapes, filmstrips and kits. In addition o providing educational materials for lasses and individualized instruction, the enter offers production services such as graphics, and prepares special media presentations. There is computer equipment available for use by students and faculty. RC staff also instruct students and faculty n the use of equipment and materials.

Religious Life

Union College takes seriously its identity as a church-related institution and is concerned that its students be made aware of the value of vital faith as well as academic excellence. We seek to be faithful to John Wesley's affirmation that a whole person is one who unites knowledge with vital piety.

Chapel worship services are held on campus twice weekly, are ecumenical in nature, and utilize the gifts and graces of the campus minister, other clergy, faculty, and students. Students are given many opportunities to participate in vesper services, prayer groups, Bible studies, and other informal discussion groups and are given ample opportunity and encouragement to grow in their understanding of the Christian faith. Celebrations of the Lord's Supper are held frequently. The Religious Life Center, in the heart of the campus, provides a setting for informal worship, study, discussion, and fellowship.

The campus minister and other community clergy are available for personal Christian counseling.

The Willson-Gross Lectures and the Staley Distinguished Christian Scholar Lectures seek to bring outstanding speakers to the campus to discuss and provide information about the Christian faith. The Religious Life Committee, composed of students, faculty, and local clergy, works with the campus minister as an advisory group to ensure that religious life programs are appropriate to the needs of the students and the campus community.

Students are encouraged to worship regularly in the church of their choice and to participate in the various denominational and faith-oriented groups on campus and in the community.

STATEMENT OF PURPOSE
(Mission Statement)

Union College is an independent institution of higher education affiliated with the United Methodist Church. It is dedicated to maintaining an academic environment that stimulates intellectual curiosity and scholastic competence, encourages an understanding of and commitment to the Christian faith, and undergirds the development of the whole person, so that students will develop the human resources needed to live creatively and wholesomely in a changing world.

Students are admitted to Union College without regard to race, creed, age, sex, or physically handicapping condition. Although eastern Kentucky and the general mid-Appalachian region constitute the primary service area of the college, it is intended that a balance will be maintained by enrolling applicants from across the nation and around the world.

Union College is committed to providing a faculty characterized by sound scholarship, stimulating teaching, exemplary character, and a deep concern for the needs of students. Classes are small, many teaching and learning options are provided, and opportunities for both professional and informal counseling and guidance are abundant.

Union College desires to provide a broad academic program to meet a wide variety of student and social needs and interests. The basic undergraduate liberal arts program of the college provides opportunities for preparation in the professions as well as general education in the humanities, arts, social studies, and sciences. Union College also has curricula at the certificate, associate degree, and graduate levels. These latter curricula are closely coo dinated with regional manpower need Credit and non-credit continuing educatio offerings are available for persons seekin skills and/or desiring personal enrichmen Classes in all categories are offered on de mand in various communities within th primary service area of the college in order t provide maximum convenience and min mum cost for students.

Union College affirms a special concer for improving the quality of life in Ap palachia. The academic program provide undergraduate and graduate curricula i education that contain elements designed t address the unique needs of the publi schools in the region. Appalachian regiona studies make available to all interested students a basis for understanding the history and distinctive features of the region The college's community service programs provide both on-campus and off-campus in struction in a variety of subjects for the educationally disadvantaged at the pre college level as well as non-credit continuing education classes for the community a large.

In order to further the development of a free society of responsible individuals, Union College is committed to student involvement in institutional governance as an aid to the development of responsibility and leadership capabilities. Through student outreach programs a philosophy of life is encouraged that has a significant place for using one's time, talents, and resources in voluntary service activities.

A STATEMENT OF VALUES

nion College is dedicated to preparing udents for living informed, socially seful, personally fulfilling, and piritually vital lives. This commitment volves using knowledge within a con-xt of Christian values. Although it is cognized that as an educational in-itution Union College has an obliga-on to help students understand other lue systems and their effects when anslated into specific areas of human ctivity, as a United Methodist Church-lated college Union affirms an institu-onal stance based on Christian values uch as have evolved in the Judeo-hristian tradition and are contained in e Old and New Testaments. Our intent both to confess and to practice the hristian faith in all our endeavors.

IMPLICIT IN THIS STATEMENT OF ALUES IS THE REQUIREMENT THAT NION COLLEGE COMMIT ITSELF TO HE VALUES ENUNCIATED BY SSURING TO THE MAXIMUM EX-ENT POSSIBLE:

o Its Students

) the fullest of opportunities to receive a quality liberal arts education.
2) strong attention to, and genuine concern for, each individual in the college community, including emphasis upon the unique value of each person.
3) a continuing concern that they learn to appreciate and accept life styles that reflect integrity, honesty, compassion, and social responsibility.
4) a commitment to provide the experiences necessary to acquire a meaningful understanding of and dedication to Christian love and service to both God and neighbor.

o Its Faculty and Staff

1) a campus atmosphere of responsible academic freedom dedicated to the constant search for truth.
2) an academic community dedicated to openness and acceptance of its pluralistic composition, including personnel policies and practices that are recognized without regard to race, creed, sex, color, physical handicap, or national origin.
3) a constant reminder of the power of Christian example.

To Its Alumni, Benefactors, and the Parents of Its Students

(1) faithful and responsible stewardship of all funds and gifts entrusted to the College.
(2) continuance of meaningful traditions, particularly those unique to a church-related institution, while at the same time encouraging the exploration and implementation of new value-centered activities especially of the type that have strong Christian relationship.
(3) continuing appreciation for the rich heritage of Union College as an independent, non-sectarian, church-related institution in the Christian tradition.

To The United Methodist Church

(1) acceptance of Jesus Christ as God's revelation of Himself, and of the Holy Spirit as God's continuing presence in life.
(2) acceptance of the moral standards which have evolved in the Judeo-Christian tradition as our ideals for living, working, and witnessing in an academic community, and as the standards for our teachings and personal example.
(3) sensitivity to and a conscientious effort directed toward the satisfaction of the spiritual needs and concerns of the college's students, faculty, and staff.
(4) meaningful responsiveness to and support for The United Methodist Church.

To Barbourville, Knox County, and the Appalachian Area

(1) continuing appreciation that Union College is an integral, social, educational, and spiritual part of the Barbourville and Knox County communities, and of Appalachia.
(2) dedication of the college's resources in teaching, research, and service to the enrichment of the communities of which Union College is a vital part.
(3) a commitment of the personal resources represented by the college's students, staff, and faculty to local churches of the immediate and larger community.

UNDERGRADUATE CALENDAR 1984-85

Summer, 1984 - First Session

May 5, Saturday	Tests for new summer session students.
June 3, Sunday	Dormitories open for new students at 1:00 p.m. First meal at 4:30 p.m.
June 3-9	Elderhostel.
June 4, Monday	Advising and Registration: 8:00 a.m. (Late fee after this date). Students may register for both summer sessions. Classes begin on abbreviated schedule.
June 7. Thursday	Last day for schedule changes. Last day to register for first summer session.
June 17-23	Elderhostel.
June 20, Wednesday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
July 4, Wednesday	Independence Day (classes meet as usual).
July 6, Friday	Final Examinations for first summer session.

Summer, 1984 - Second Session

July 6, Friday	Advising and Registration: 2:30 p.m. (Late fee after this date.)
July 9, Monday	Classes begin on regular schedule.
July 12, Thursday	Last day for schedule changes. Last day to register for second summer session.
July 16, Monday	Orientation and Advance Registration for fall semester for new students.
July 25, Wednesday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
August 6, Monday	Orientation and Advance Registration for fall semester for new students.
August 6 - 8	Advance Registration for fall semester.
August 10, Friday	Final Examinations for second summer session.
August 11, Saturday	Commencement: 10:30 a.m. Last meal at noon. Dormitories close at 4:00 p.m.

Fall Semester, 1984

August 21, Tuesday	****Last day to finalize advance registration for fall semester****
August 30, Thursday	Administrative meetings. Meeting for new faculty members: 2:00 p.m.
August 31, Friday	All-faculty, pre-registration conference: 9:00 a.m. Divisions meet: 1:30 p.m.
September 1, Saturday	Meeting for all academic advisors: 9:30 a.m.
September 2, Sunday	Dormitories open at 1:00 p.m. First meal at 6:00 p.m.
September 3, Monday	Academic Advising.
September 4, Tuesday	Registration. (Late fee after this date.)
September 5, Wednesday	Classes begin (MWF week schedule).
September 4 - 7	Constitutes the first week for refund purposes.
September 12, Wednesday	Last day for schedule changes. Last day to register for fall semester. Last day to apply for May graduation.
October 11, Thursday	Founders' Convocation.
October 24-25	Mid-semester Examinations (on regular class schedule).
October 26-28	Mid-semester weekend; no classes. (Dormitories remain open; food service available.)
October 29, Monday	Classes resume (TTF week schedule).
October 31-November 9	Counseling sessions with advisors. (Classes meet as usual.)

**Students who register during advance registration and do not make financial arrangements by date indicated will have to repeat registration during the regular registration period.

lovember 16, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
lovember 20, Tuesday	Last meal at 5:00 p.m.
lovember 21, Wednesday	Dormitories close at 10:00 a.m.
Jovember 21-25	Thanksgiving vacation; no classes.
Jovember 25, Sunday	Dormitories re-open at 1:00 p.m. First meal at 4:30 p.m.
Jovember 26, Monday	Classes resume (TTF week schedule).
Jovember 28-December 7	Advising and Advance Registration for spring semester.
)ecember 15, Saturday	Final Examinations for Saturday classes.
)ecember 21, Friday	****Last day to finalize advance registration for spring semester****
)ecember 19-21	Final Examinations for weekday classes.
)ecember 22	Last meal at noon. Dorms close at 4:00 p.m.

Spring Semester, 1985

anuary 6, Sunday	Dormitories re-open at 1:00 p.m. First meal at 4:30 p.m.
anuary 7, Monday	Academic Advising. Counseling and Orientation for new students.
anuary 8, Tuesday	Registration. (Late fee after this date.)
anuary 9, Wednesday	Classes begin (MWF week schedule).
anuary 8-11	Constitutes the first week for refund purposes.
anuary 16, Wednesday	Last day for schedule changes. Last day to register for spring semester. Last day to apply for August graduation.
Aarch 7 - 8	Mid-semester Examinations (on regular class schedule).
Aarch 9, Saturday	Spring Vacation begins. Last meal at noon. Dormitories close at 4:00 p.m.
Aarch 17, Sunday	Dormitories re-open at 1:00 p.m. First meal at 4:30 p.m.
Aarch 18, Monday	Classes resume (TTF week schedule).
Aarch 20-29	Counseling sessions with advisors. (Classes meet as usual.)
April 5 - 8	Easter vacation; no classes. (Dormitories remain open; food service available.)
April 9, Tuesday	Classes resume (MWF week schedule).
April 12, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
April 22 - May 3	Advising and Advance Registration for May Interim, summer sessions and fall semester.
April 25, Thursday	Honors Convocation
May 4, Saturday	Tests for new summer session students.
May 6, Monday	****Last day to finalize advance registration for May Interim****
May 8 - 11	Final Examinations.
May 12, Sunday	Last meal at noon for spring semester students. Commencement: 2:30 p.m.

May Interim, 1985

May 12, Sunday	First meal at 5:00 p.m. for May Interim term students.
May 13, Monday	Registration. Classes begin. (Late fee after this date.)
May 14, Tuesday	Last day for schedule changes. Last day to register for May Interim.
May 15, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
May 31, Friday	Final Examinations.

**Students who register during advance registration and do not make financial arrangements by date indicated will have to repeat registration during the regular registration period.

UNDERGRADUATE CALENDAR 1985-86

Summer, 1985 - First Session

May 4, Saturday	Tests for new summer session students.
June 2, Sunday	Dormitories open for new students at 1:00 p.m. First meal at 4:30 p.m.
June 3, Monday	Advising and Registration: 8:00 a.m. (Late fee after this date.) Students may register for both summer sessions. Classes begin on abbreviated schedule.
June 6, Thursday	Last day for schedule changes. Last day to register for first summer session.
June 19, Wednesday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
July 3, Wednesday	Final Examinations for first summer session.
July 4, Thursday	Independence Day holiday. (Dormitories remain open; food service available.)

Summer, 1985 - Second Session

July 5, Friday	Advising and Registration: 9:00 a.m. to 3:30 p.m. (Late fee after this date.)
July 8, Monday	Classes begin on regular schedule.
July 11, Thursday	Last day for schedule changes. Last day to register for second summer session.
July 15, Monday	Orientation and Advance Registration for fall semester for new students.
July 24, Wednesday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
August 5, Monday	Orientation and Advance Registration for fall semester for new students.
August 5 - 7	Advance Registration for fall semester.
August 9, Friday	Final Examinations for second summer session.
August 10, Saturday	Commencement: 10:30 a.m. Last meal at noon. Dormitories close at 4:00 p.m.

Fall Semester, 1985

August 20, Tuesday	****Last day to finalize advance registration for fall semester****
August 29, Thursday	Administrative meetings. Meeting for new faculty members: 2:00 p.m.
August 30, Friday	All-faculty, pre-registration conference: 9:00 a.m. Divisions meet: 1:30 p.m.
August 31, Saturday	Meeting for all academic advisors: 9:30 a.m.
September 1, Sunday	Dormitories open at 1:00 p.m. First meal at 6:00 p.m.
September 3, Monday	Academic Advising.
September 4, Tuesday	Registration. (Late fee after this date.)
September 5, Wednesday	Classes begin (MWF week schedule).
September 3 - 6	Constitutes the first week for refund purposes.
September 11, Wednesday	Last day for schedule changes. Last day to register for fall semester. Last day to apply for May graduation.
October 10, Thursday	Founders' Convocation.
October 23-24	Mid-semester Examinations (on regular class schedule).
October 25-27	Mid-semester weekend; no classes. (Dormitories remain open; food service available.)

**Students who register during advance registration and do not make financial arrangements by date indicated will have to repeat registration during the regular registration period.

ctober 28, Monday	Classes resume (TTF week schedule).
ctober 30-November 8	Counseling sessions with advisors. (Classes meet as usual.)
ovember 15, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
ovember 28-December 1	Thanksgiving vacation; no classes.
ecember 1, Sunday	Dormitories re-open at 1:00 p.m. First meal at 4:30 p.m.
ecember 2, Monday	Classes resume (MWF week schedule).
ecember 4 - 13	Advising and Advance Registration for spring semester.
ecember 14, Saturday	Final Examinations for Saturday classes.
ecember 20, Friday	****Last day to finalize advance registration for spring semester****
ecember 18-20	Final Examinations for weekday classes.
ecember 21	Last meal at noon. Dorms close at 4:00 p.m.

pring Semester, 1986

nuary 5, Sunday	Dormitories re-open at 1:00 p.m. First meal at 4:30 p.m.
nuary 6, Monday	Academic Advising. Counseling and Orientation for new students.
nuary 7, Tuesday	Registration. (Late fee after this date.)
nuary 8, Wednesday	Classes begin (MWF week schedule).
nuary 7-10	Constitutes the first week for refund purposes.
nuary 15, Wednesday	Last day for schedule changes. Last day to register for spring semester. Last day to apply for August graduation.
arch 6 - 7	Mid-semester Examinations (on regular class schedule).
arch 8, Saturday	Spring Vacation begins. Last meal at noon. Dormitories close at 4:00 p.m.
arch 16, Sunday	Dormitories re-open at 1:00 p.m. First meal at 4:30 p.m.
arch 17, Monday	Classes resume (TTF week schedule).
arch 19-20	Counseling sessions with advisors. (Classes meet as usual.)
arch 28-31	Easter vacation; no classes. (Dormitories remain open; food service available.)
pril 1, Tuesday	Classes resume (MWF week schedule).
pril 11, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
pril 21 - May 2	Advising and Advance Registration for May Interim, summer sessions and fall semester.
pril 24, Thursday	Honors Convocation.
lay 3, Saturday	Tests for new summer session students.
lay 5, Monday	****Last day to finalize advance registration for May Interim****
lay 7 - 10	Final Examinations.
lay 11, Sunday	Commencement: 2:30 p.m.

lay Interim, 1986

lay 12, Monday	Registration. Classes begin. (Late fee after this date.)
lay 13, Tuesday	Last day for schedule changes. Last day to register for May Interim.
lay 16, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W."
lay 30, Friday	Final Examinations.

**Students who register during advance registration and do not make financial arrangements by date indicated will have to repeat registration during the regular registration period.

ADMINISTRATION AND STAFF

JACK C. PHILLIPS, *President of the College* — A.B., Birmingham Southern College; M.Div., Vanderbilt University; LL.D., Union College.

MAHLON A. MILLER, *President Emeritus* — B.S., University of Pittsburgh; M.Div., S.T.M., Drew Theological Seminary; Case Institute of Technology; Western Reserve University; Union Theological Seminary; Zurich University; Tuebingen University; D.D., Union College; L.L.D., Morehead State University.

Administrative Affairs

EDWARD H. BLACK, *Vice President for Administration; Affirmative Action Officer* — B.A., M.A. in Education, Union College.

GEORGE T. BLACK, *Director of Data Processing* — B.S., Union College.

JACK T. KARR, *Junior Programmer* — Sue Bennett College; Union College.

LOUISE MARTIN, *Computer Operator; Data Entry Supervisor* — LaCrosse State Teachers College; Union College.

Academic Affairs

B. CARLYLE RAMSEY, *Vice President for Academic Affairs* — A.A., Miami Dade Community College; B.A., University of Florida; M.S., Ph.D., Florida State University.

H. WARREN ROBBINS, *Dean of Graduate Academic Affairs* — B.S., Eastern Kentucky University; M.A., George Peabody College; Indiana University; University of Kentucky; Ed.D., University of Tennessee.

E. EDWIN LeMASTER, *Registrar* — B.A., Asbury College; B.D., Asbury Theological Seminary; M.A., Butler University.

JAMES B. McFERRIN, *Head Librarian* — B.A., Erskine College; B.S. in Library Science, University of Illinois; Columbia University; University of Southern California.

VIRGINIA B. SADDLER, *Assistant Librarian* — B.A., Cornell College; B.S. in Library Science, M.S., University of Illinois.

FAYE FRANCE, *Circulation Supervisor in the Library* — Union College.

JANET TARRY, *Director of Special Programs* — B.A., University of Louisville; M.A., Murray State University.

DEBORAH CORNELIUS, *Assistant Director of Upward Bound Program* — B.A., Cumberland College; M.A. in Education, Union College.

JANE ROBBINS, *Upward Bound Counselor* — B.S., Union College.

CONNIE MAYFIELD, *Director of Placement and Career Counselor* — B.A., Oklahoma Baptist University; M.S., University of Kentucky.

SUSIE HALE, *Coordinator of Adult Education* — Union College.

Student Affairs

FRANCES PATRIDGE, *Vice President for Student Affairs* — B.S., University of Arkansas; M.A., George Peabody College; University of Southern California; Indiana University; L.H.D., Union College.

DANIEL CRABTREE, *Director of Admissions* — B.A., University of Kentucky; M.A. in Education, Union College.

TERESA ALLIE, *Admissions Counselor* — B.S., Union College.

DONALD McKINNEY, *Dean of Students and Director of the Student Center* — B.A., Eastern Kentucky University; M.Div., Lexington Theological Seminary.

FREDA NEW, *Administrative Assistant to the Dean of Students* — Union College.

GARY M. BARNETT, *Dormitory Director, Stevenson Hall* — B.S., Western Kentucky University; Union College.

PAT SCHWEITZER, *Dormitory Director, Pfeiffer Hall* — B.S., M.A., Eastern Kentucky University.

PAUL S. MOORE, *Director of Athletics* — A.B., Union College; M.S., University of Tennessee; Indiana University; University of Oregon; Ed.D., University of Alabama.

JEFF PRICE, *Assistant Basketball Coach* — B.S., Pikeville College.

JOHN PATE, *Head Football Coach* — B.S., North Georgia College.

ROBERT SHACKLEFORD, *Assistant Football Coach* — B.A., St. Norbert College.

JAMES HUGH POWELL, *Campus Minister* — B.A., University of Virginia; M.Div., Vanderbilt University.

DEBRA SMITH, *Director of Financial Aid* — B.S., Union College.

LORI STEVENOT, *Financial Aid/Work Study Counselor* — B.S., Centre College.

PHYLLIS SEXTON, *Bookstore/Post Office Clerk* — B.S., M.A. in Education, Union College.

College Relations and Development

HILTON H. TOWNSEND, *Vice President for College Relations and Development* — B.S., Union College; M.A., University of Kentucky; HH.D., Union College.

MARY WALKER, *Administrative Assistant to the Vice President for College Relations and Development.*

WIGHT HENDRIX, *Director of Alumni Affairs* — B.S., Union College; M.A., University of Kentucky.

RHONDA BARNETT PRICE, *Director of College Relations* — B.A., Pikeville College.

Business Affairs

CHERYL BROWN, *Business Manager and Treasurer* — B.S., Union College.

MYRLYN LAWSON, *Assistant Treasurer, Assistant Business Manager* — B.A., Union College.

MARSHALL B. POTTER, *Superintendent of Buildings and Grounds.*

EUGENE BRANSTUTTER, *Assistant Superintendent of Buildings and Grounds.*

RICKIE ALLEN, *Director of Purchasing* — B.S., Union College.

CARITA MILLS, *Student Loan Officer* — B.S., Union College.

THE FACULTY

ANNE B. ADAMS, *Reading Specialist (Instructor)* — B.S., Murray State University; M.A. in Education, Union College.

KENNETH N. ALFORD, *Assistant Professor of Mathematics* — B.A., Texas A&M University; M.S., New Mexico Highlands University.

PAULA J. ALLEN, *Assistant Professor of Office Administration* — B.S., Cumberland College; M.A. in Education, Union College; M.A. Business Education, Eastern Kentucky University.

RYAN G. BUNCH, *Instructor of Coal Technology* — B.S., M.A., Eastern Kentucky University.

CLEVIS D. CARTER, *Assistant Professor of Physical Science; Director, Coal Technology Program*—B.A., Union College; M.A., George Peabody College; University of Tennessee; University of Kentucky; Ohio State University.

SANTARAM CHILUKURI, *Professor of Physics; Chairman, Division of Natural Sciences* — B.S., M.S., Ph.D., Andhra University, India; SUNY at Buffalo; Yale University. On leave 1984-85.

MARTHA L. CORNWELL, *Assistant Professor of Sociology* — B.A., SUNY at Geneseo; M.A., PhD., SUNY at Buffalo.

L. JAMES COX, *Associate Professor of Social Work, Coordinator of Appalachian Semester* — B.A., Cumberland College; M.S.S.W., Kent School of Social Work, University of Louisville; A.C.S.W., Southern Baptist Theological Seminary.

ALLEN D. ENGLE, *Assistant Professor of Business Administration; Head, Department of Business* — B.B.A., M.B.A., Eastern Kentucky University.

DIANNE RUTH FERRIS, *Associate Professor of English, Chairman, Division of Humanities* — B.A., University of Minnesota; M.A., Ph.D., University of Washington.

JAN M. FINKEL, *Professor of English; Head, Department of English and Foreign Languages* — A.B., Wittenberg University; M.A., Ph.D., Indiana University.

KAREN L. FISHBAUGH, *Instructor of Health and Physical Education; Coach, Women's Basketball and Softball* — B.A., Otterbein College; M.S., Eastern Kentucky University.

MARY ANN GHOSAL, *Assistant Professor of Mathematics* — B.A., B.S., Missouri Valley College; M.S.T., Illinois Institute of Technology; Ed.S., University of Kentucky.

ALLAN E. GREEN, *Associate Professor of Music;* — B.M., Western Michigan University; M.M., Indiana University; Pupil of Julius Stulberg, David Dawson, and Otto Wimmler in Strings; Wolfgang Vacano in Conducting.

JOE C. HACKER, *Assistant Professor of Business* — B.S., Union College; M.A., Eastern Kentucky University; University of Georgia; University of Tennessee.

ELLA KAY HENSLEY, *Assistant Professor of Economics* — B.A., M.A., M.A.M.R.D., Ph.D., University of Florida; North Carolina State University; Cornell University.

LARRY INKSTER, *Assistant Professor of Health and Physical Education; Assistant Director of Athletics; Head Coach for Baseball and Soccer* — B.S., M.A. in Education, Union College; M.A., Eastern Kentucky University.

A. JAMES KERLEY, *Assistant Professor of Education; Head, Department of Education* — B.S., Tennessee Technological University; M.A., The Citadel; Ph.D., Florida State University.

NAZIR A. KHATRI, *Assistant Professor of Chemistry* — B.Sc., M.Sc., University of Karachi; Ph.D., University of Nebraska.

MARY ALICE LAY, *Assistant Professor of Education* — B.S., M.S., University of Kentucky; University of North Dakota; Indiana State University.

JEAN LETCH, *Associate Professor of Education* — B.A., M.A., Ed.S., University of Northern Iowa; Ph.D., University of Iowa.

W. GORDON MARIGOLD, *Professor of Languages* — B.A., University of Toronto; M.A., Ohio State University; University of Munich; Ph.D., University of Toronto.

JOHN B. MASON, *Assistant Professor of History* — A.B., Albion College; A.M., Ph.D., Harvard University; Trinity College; Oxford University.

ROBERT D. MATTHEWS, *Francis Landrum Memorial Professor of Religion; Head of Department of Philosophy and Religion* — B.A., Wheaton College; S.T.B., Ph.D., Boston University; Clark University; Archaeological excavation, Gezer, Israel.

CONNIE R. MAYFIELD, *Instructor of General Studies* — B.A., Oklahoma Baptist University; M.S., University of Kentucky.

DERIL K. MAYS, *Professor of Psychology* — B.S., Union College; M.A., University of Kentucky; Ed.D., University of Tennessee.

JAMES B. McFERRIN, *Associate Professor of Library Science, Head Librarian* — B.A., Erskine College; B.S. in Library Science, University of Illinois; Columbia University; University of Southern California.

TODD A. METCALFE, *Instructor of Physical Education* — B.S., Ithaca College; M.A., Western Kentucky University.

PAUL S. MOORE, *Professor of Health and Physical Education; Chairman, Division of Applied Science; Head of Department of Health and Physical Education* — A.B., Union College; M.S., University of Tennessee; Indiana University; University of Oregon; Ed.D., University of Alabama.

FRANCIS E. NUSSBAUM, JR., *Professor of Biology, Acting Chairman, Division of Natural Sciences, 1984-85* — B.S., Ohio University; Ph.D., Michigan State University.

FRANCES PATRIDGE, *Associate Professor of Health and Physical Education* — B.S., University of Arkansas; M.A., George Peabody College; University of Southern California; Indiana University; L.H.D., Union College.

BILL PETERSON, *Instructor of Health and Physical Education; Head Basketball Coach* — A.A., St. Petersburg Junior College; B.A., Eckerd College; M.S., Louisiana Tech University.

REBECCA A. PETTYS, *Assistant Profess of Drama and Speech* — B.A., Berea Colle M.A., Northwestern University; Ph.D., India University.

ROBERT V. PETTYS, *Assistant Professor Business* — B.A., M.A., Michigan Sta University; M.B.A., Ed.D., Indiana Universi

H. WARREN ROBBINS, *Professor of Edu tion* — B.S., Eastern Kentucky Universi M.A., George Peabody College; India University; University of Kentucky; Ed. University of Tennessee.

RONALD ROSEN, *Assistant Professor Biology* — B.A., Hendrix College; M.S., C orado State University; Ph.D., University Manitoba.

C. RONALD ROSENSTIEL, *Assistant P fessor of Sociology* — B.A., M.S., M.A., Ph. University of Kentucky.

VIRGINIA B. SADDLER, *Associate Profess of Library Science, Assistant Librarian* B.A., Cornell College; B.S. in Library Scien M.S., University of Illinois.

PAUL J. STEPHENSON, *Assistant Profess of Accounting* — B.S., M.A., Brigham You University; C.P.A.

BETTY S. STROUD, *Associate Professor Music* — B.S., M.A., Louisiana State Univ sity; Ed.D., University of Illinois.

ROBERT W. SWANSON, *Associate P fessor of Environmental Studies* — B.S., P due University; M.S., Indiana University N thwest; Ed.D., Indiana University.

JOE E. TARRY, *Professor of Music; Hea Department of Music and Fine Arts* B.M.E., Murray State University; B.C.M Southern Baptist Theological Seminar M.M., George Peabody College for Teache Ph.D., Florida State University.

JOHN C. TAYLOR, *Associate Professor History; Chairman, Division of Soci Sciences* — B.A., Juniata College; J.D., Du University; M.A., Ph.D., Pennsylvania Sta University.

DORIS B. THOMPSON, *Assistant Profess of Education* — B.S., Livingston Universit M.A., Ph.D., University of Alabama; Ea Carolina University.

ANDELYS WOOD, *Associate Professor English* — A.B., Middlebury College; Ph.D Indiana University.

LESTER G. WOODY, *Professor of English* B.A., University of Virginia; M.A., Universi of Richmond; Ph.D., University of Nort Carolina.

ADJUNCT FACULTY

PATRICK N. ANGEL, *Instructor of Coal Technology* — A.A., Alice Lloyd College; A.A., Forestry and Wood Technical School, University of Kentucky; B.S., M.S., Stephen F. Austin State University.

JOHN E. BABB III, *Instructor of Coal Technology* — B.S., Eastern Kentucky University; Class I Certification, Kentucky Department for Natural Resources and Environmental Protection; MSHA Certification, State of Kentucky.

ANN MARIE BINGHAM, *Instructor of Music* — B.S., University of Tennessee; M.M., Eastern Kentucky University.

STANLEY T. BRAY, C.P.A., *Instructor of Accounting* — B.S., Tennessee Technological University.

PATSY S. COLE, *Instructor of Business Education and Computer Science* — B.S., Cumberland College; M.A. in Education, Rank I, Union College.

ROY WAYNE CORNELIUS, *Instructor of Coal Technology* — Cumberland College, 50 hours; Union College, 18 hours; MSHA Certification, State of Kentucky.

SAMUEL E. DAVIES, P.S.C., *Instructor of Business Law* — B.S., Union College; J.D., University of Kentucky, College of Law.

STEVEN L. GREENE, C.P.A., *Instructor of Accounting* — B.B.A., Eastern Kentucky University.

SADHNA GUPTA, *Instructor of Psychology* — B.A., M.A., M.Phil., Delhi University; M.S., Wright State University.

DAYMOND HELTON, *Instructor of Mathematics* — B.S., M.S., University of Kentucky.

THOMAS C. HUCKLEBERRY, *Instructor of Psychology* — A.B., M.A., Morehead State University.

DIANNE KAGIN, *Instructor of Art* — B.S., Cumberland College; M.A. in Education, Eastern Kentucky University.

DONNA KERLEY, *Instructor of Psychology* — B.S., Bridgewater State College; M.A., Tennessee Technological University.

DAVID E. LONG, *Instructor of Coal Technology* — A.A., Somerset Community College; B.S., University of Kentucky.

CHARLES R. MITCHELL, *Instructor of Humanities* — B.A., Union College; M.A., Indiana University.

WALTER W. OWENS, *Instructor of Coal Technology* — Surface Mine Foreman License, Licensed Blaster, States of Kentucky and Tennessee; Certified Seismologist, State of Texas.

ARLENE PREWITT, *Instructor of English* — Diploma, Skinner Business College; B.A., Lee College; M.A. in Education, Union College.

MARIAN LYNNE ROBINSON, *Instructor of Music* — B.M., Furman University; M.C.M., The Southern Baptist Theological Seminary.

PAT SCHWEITZER, *Instructor of English* — B.S., M.A., Eastern Kentucky University.

CATHY SMITH, C.P.A., *Instructor of Accounting* — B.S., Campbellsville College, University of Alabama in Birmingham.

GERALD W. YAHNE, *Instructor of Coal Technology* — B.S., M.S., University of Cincinnati; Certified Professional Geologist, State of Indiana.

JOHN YATROS, *Associate Professor of Psychology* — B.S., Concord College; M.A., West Virginia University; Ed.D., Indiana University.

FACULTY EMERITUS

ERWIN S. BRADLEY, *Professor Emeritus of History and Political Science* — B.S. in Education, Juniata College; M.A., University of Michigan; Ph.D., Pennsylvania State University.

FRANK A. GILBERT, *Professor Emeritus of Biology* — B.S., University of Massachusetts; M.A., Ph.D., Harvard University.

FRANK E. MERCHANT, *Professor Emeritus of English* — A.B., M.A., Brown University; Ph.D., University of Denver.

RENA MILLIKEN, *Professor Emeritus of Business* — A.B., Western Kentucky University; M.A., George Peabody College; Indiana University; Case Institute of Technology.

KATHLEEN MOORE, *Associate Professor Emeritus of Elementary Education* — A.B., Mississippi State College for Women; M.A., Teachers College, Columbia University; Ohio State University; University of Southern California.

WILLIAM SHERMAN OXENDINE, *Associate Professor Emeritus of History* — A.B., Union College; M.A., University of Kentucky; University of North Carolina; University of Arkansas.

MARY PETTUS, *Associate Professor Emeritus of Mathematics* — A.B., Georgetown College; M.A., University of Chicago.

CHARLES W. SIMMS, *Professor Emeritus of Education* — B.S., Millsaps College; M.A., Ph.D., George Peabody College.

BOARD OF TRUSTEES

OFFICERS OF THE BOARD

Douglas L. Blair, LL.D.
Chairman
Erland P. Stevens, Jr., LL.D.
Vice Chairman

EX OFFICIO MEMBERS

Bishop Paul A. Duffey, L.H.D.
Louisville, KY
Jack C. Phillips, LL.D.
Barbourville, KY

TRUSTEES EMERITI

Robert L. Anderson, D.D.
Cynthiana, KY
Eugene C. Cawood
Harlan, KY
Thomas A. Eastes, D.C.S.
Louisville, KY
R. Walton Gardner, D.D.
Flemingsburg, KY
Leo A. Geiss, D.C.S.
St. Charles IL
L.D. Sweazy, LL.D.
Versailles, KY
Robert E. Viall
Barbourville, KY

AT-LARGE MEMBERS

Ronnie D. Callihan
Flat Lick, KY
Ronald N. Collier, M.D.
Louisville, KY
Samuel E. Davies, J.D.
Barbourville, KY
J. Stanley Faulkner, M.D.
Bellevue, KY
Julian W. Habercam, D.D.S.
Charleston, SC
Walter J. Heddesheimer, J.D.
Strongsville, OH
Thomas H. Jenkins, Sc.D.
Houston, TX
Barbara Perry
West Liberty, KY
Homer Rice, Ph.D.
Atlanta, GA
Fred R. Stevens, LL.D.
Winter Haven, FL
Alan B. Wagner, Ph.D.
Lexington, KY
C. Noel White, D.Min.
Clayton, OH

ALUMNI MEMBERS

Jerry W. Carey
Barbourville, KY
Charles Chakour
Naperville, IL
Jean Owens Knuckles
Barbourville, KY

KENTUCKY CONFERENCE MEMBERS

John C. Anggelis, Esq.
Lexington, KY
Douglas L. Blair, LL.D.
Barbourville, KY
R.L. Brown, Jr.
Williamsburg, KY
Edward L. Cawood, LL.D.
Harlan, KY
Donald W. Durham, D.D.
Versailles, KY
Raymond Gibson, Jr., D.Min.
Versailles, KY
James Murphy
Corbin, KY
Elbert W. Ockerman, Ed.D.
Lexington, KY
Erland P. Stevens, Jr., LL.D.
Ashland, KY
Benny J. Wilson, D.M.D.
Barbourville, KY
Cecil H. Wilson, LL.D.
Barbourville, KY

LOUISVILLE CONFERENCE MEMBERS

W. Arvil Allen
Henderson, KY
John C. Brinson
Louisville, KY
Smith D. Broadbent, Jr.
Cadiz, KY
Charles R. Brown, LL.D.
Henderson, KY
Billy J. Cox, D.D.
Louisville, KY
Richard K. Fenley
Louisville, KY
Wendell E. Hurt
Louisville, KY
Douglas N. McDowell
Providence, KY
James E. Parker, M.D.
Louisville, KY
Paul Shepherd, D.D.
Bowling Green, KY
Samuel G. Swope, D.C.S.
Louisville, KY

ASSOCIATE TRUSTEES

William H. Ball, Jr.
Greensboro, NC
Jeff H. Burton
Corbin, KY
Virgil J. Fryman
Corbin, KY
H.H. Greene, L.H.D.
Lexington, KY
Ira Richard Harris
Florence, KY
Harold E. Henson, D.D.
LaGrange, KY
Patrick L. Jasper, M.D.
Somerset, KY
L. Carman King, MA.D.
Hopkinsville, KY
Roy L. Pulliam, Jr.
Hazard, KY
John M. Robsion, Jr., LL.
Fort Lauderdale, FL
Claudia Sanders, LL.D.
Shelbyville, KY

INDEX

Academic Advising 7
Academic Amnesty 31
Academic Calendar 6
Academic Scholarships 19
Accounting, Courses in 42
Administration and Staff 96
Admission(s):
  Advanced Placement 6, 13
  Application form 103
  GED Acceptance 12
  of Foreign Students 12
  Procedure 12
  Requirements, undergraduate 12
  to Student Teaching, Requirements 47
  to Teacher Education Program, Requirements 47
Advanced Placement 7, 13
Advanced Placement for Veterans 7
Advanced Standing and Transfer 13
Appalachian Semester 8, 83
Appalachian Studies 8, 83
Applied Music, Courses in 63
Applied Science, Division of 39
Art, Courses in 58
Assistantships 18
Associate Degree Programs 41, 49, 69, 76
Athletics 87
Attendance Regulations 27
Automobiles 88
Awards 25

Behavioral Sciences, Courses in 79
Biology, Courses in 70
Board of Trustees 100
Buildings 86
Business, Degree Programs in 39
Business, Department of 39
Business Administration, Courses in 43
Business and Music 40
Business Education, Courses in 44

Calendar for the College Year (1984-85, 1985-86) 92
Campus Housing 88
Career Ladder Concept 6
Career Oriented Programs 6
Career Planning, Academic Advising, and Placement 6
Challenge Examinations 29
Chemistry, Courses in 72
Christian Education 67
Church Music, Courses in 64
Class Attendance 27
Classification of Students 13
Coal Mining Technology, Degree Programs in 76
College Expenses 14
College-Level Examination Program (CLEP) 7
Combined Degrees 30
Computer Information Systems, Courses in 44
Cooperative Nursing Program 6, 84
Correspondence Credit 29
Course Numbering System 35
Credit by Examination 7, 29
Credit for Prior Learning 6
Credit/Fail System 28
Curricula:
  Division of Applied Science 39
  Division of Humanities 55
  Division of Natural Sciences 69
  Division of Social Sciences 79

Degrees:
  Bachelor of Arts, Requirements for Graduation 30
  Bachelor of Music, Requirements for Graduation 30
  Bachelor of Science, Requirements for Graduation 30
  Combined 30
  Table of 34
  with Distinction 31
Developmental Studies Program 10
Diploma in Office Administration 42
Drama and Speech, Courses in 59

Early Start Summer Program 13
Economics, Courses in 45
Education:
  Courses in 51
  Curricula in 48
  Degree programs in 49, 50
  Department of 46
  Experiential 8
  Graduate Program in 8
  Vocational 49
Employee Scholarships 18
Employment:
  Work-Grant 17
  Work-Study 17
Endowments 24
English, Courses in 55
English and Foreign Languages, Department of 55
Engineering, Combined Degree in 70
Ensembles (Music) 64
Entrance Tests (SAT, ACT) 12
Environmental Studies 8
Environmental Studies, Courses in 72
Examinations and Reports of Marks 28
Expenses:
  Graduate 14
  May Interim Term 14
  Other 14
  Summer Session 14
  Undergraduate 14
Experiential Education 6
Extension and Correspondence 29

Faculty 97
Faculty, Adjunct 99
Faculty Emeritus 99
Fees 14
Financial Assistance 16
French, Courses in 57

GED Acceptance 12
General Information 27
General Science, Courses in 73
General Studies Requirements 36
Geography, Courses in 83
German, Courses in 58
Graduate Program in Education 10
Graduation Requirements 30
Grants:
  Kentucky Tuition 17
  Pell 17
  Supplemental Education Opportunity (SEOG) 17
  Work 17

Health, Courses in 52
Health and Physical Education, Department of 52
Health Certificate 12
Health Sciences, Combined Degree in 70
Health Service 88
High-School-Special Program 13
Historical Sketch of Union College 2
History, Courses in 81
Honor Students 28
Housing 88
Humanities, Courses in 55
Humanities, Division of 55

Individualized Major 8
Intramurals 87

Junior College Scholarships 19

Kentucky Tuition Grant 17
KHEAA Guaranteed Student Loan Program 17

Library and Learning Resource Center 89
Loans 17
Loan-Grants 18
Location of Campus and Buildings 86

Majors and Degree Programs (Table).....34
Map of Campus .....inside back cover
Marking System 28
Mathematics, Courses in 74
May Interim Term 8
May Interim Term Expenses 14
Medical Technology, Degree in 69
Mining Management 77
Mission Statement (Statement of Purpose) ..3, 90
Music and Business 62
Music and Fine Arts, Department of 58
Music, Degree Programs in.....60
Music Education, Courses in 65
Music History and Appreciation, Courses in 64
Music Theory, Courses in 65

National Direct Student Loan Program 17
Natural Sciences, Division of 69
Nursing, Special Cooperative Program in 9, 84

Oak Ridge Seminars 7
Office Administration, Courses in 45
Office Administration, Diploma in 42

Payment Policy 15
Pell Grants 17
Personal Interview 12
Philosophy, Courses in 68
Physical Education, Courses in 53
Physical Therapist Assistant Program 69
Physics, Courses in 75
Placement Services 6
Planned Curriculum.....31
Political Science, Courses in 82
Pre-Professional Programs:
- Dentistry 69
- Engineering 69
- Law 81
- Medical Technology 69
- Medicine 69
- Optometry.....69
- Pharmacy 69
- Physical Therapy 69
- Veterinary Medicine 69

Probation 28
Program(s):
- Associate Degree (2-year) 41, 49, 69, 76
- Career-Oriented 3
- College-Level Examination (CLEP) 7
- Cooperative Nursing 6, 84
- Developmental Studies 10
- Early Start 13
- Graduate 10
- High-School-Special 13
- KHEAA Guaranteed Student Loan 17
- Majors and Degree (Table) 34
- Music and Business 62
- National Direct Student Loan 17
- Oak Ridge 7
- Physical Therapist Assistant 69
- Pre-Professional 69
- Teacher Education:
  - Objectives 46
  - Requirements for Admission to 47
- Work-Study 17

Psychology, Courses in.....79
Publications 86

Quality Point Standing 28

Recommendations 12
Refund Information 15
Religion, Courses in 67
Religion and Philosophy, Department of.....66
Religious Life 89

Requirement(s):
- Admission 12
- Admission to Student Teaching 47
- Admission to Teacher Education Program 47
- Foreign Language 30
- General Studies 36
- Graduation 30

Reserved Course Numbers 35
Room and Board 14

Scholarships:
- Academic 19
- Alumni.....19
- Employee 18
- Junior College 19
- Other 19

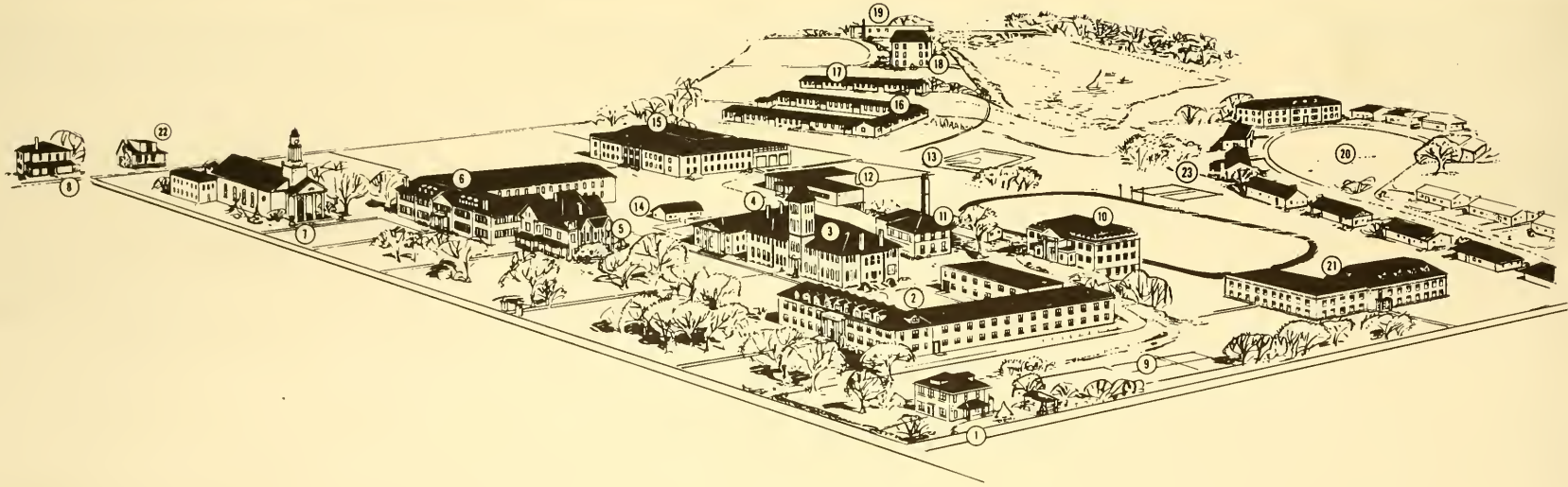
Science Education Majors 70
Secondary School Transcript 12
Social Sciences, Division of 79
Social Life.....88
Sociology, Courses in 80
Special Cooperative Nursing Program 6, 84
Special Non-Traditional Majors and Minors.....8
Speech and Drama, Courses in 59
Statement of Purpose (Mission Statement) ..3, 90
Statement of Values 91
Student Conduct 87
Student Financial Aid 16
Student Load 27
Student Organizations 86
Student Teaching.....47
Summer Orientation 13
Supplemental Educational Opportunity Grant (SEOG) 17
Suspension.....28

Teacher Education Program, Objectives 46
Teacher Education, Requirements for Admission to 47
Tests, Entrance (SAT, ACT).....12
Transfer and Advanced Standing 13
Trustees, Board of 100
Tuition.....14

Undecided Majors 35
Undergraduate Calendar 1984-85 92
Undergraduate Calendar 1985-86 94

Vocational Education 49, 50

Work-Grant 17
Work-Study Program 17



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Centennial Hall
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Tye House
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts

UNION COLLEGE

Barbourville
Kentucky 40906
(606) 546-4151

UNION COLLEGE

GRADUATE STUDIES PROGRAM CATALOG '84-'85

BARBOURVILLE, KENTUCKY

A D D E N D U M

The College Has Developed Five Succinct Statements Based on Its Statement of Purpose That Capture The Important Facets of The College. They Are As Follows:

UNION - A COLLEGE WITH A PURPOSE

-- Being Concerned For The Student As A Whole Person.

-- Providing An Outstanding Faculty Dedicated To Teaching.

-- Maintaining Both Liberal-Arts and Career-Oriented Curricula.

-- Serving The Appalachian Region And Valuing Its Heritage.

-- Providing Opportunities for Individual Growth Through Service And Self-Government.

CALENDAR

ugust 6-8 Advance Registration for Fall Semester
Registrar's Office.

*PLEASE NOTE THERE WILL BE NO OFF CAMPUS
REGISTRATION FOR THE FALL SEMESTER

ugust 21, Tuesday - Last Day to Finalize Advance
egistration for Fall Semester.

ugust 30, Thursday - Advance Registration in
peed Hall - 4:30-8:00 p.m.

eptember 3, Monday - Registration in Speed Hall
:00-4:30 p.m. LATE FEE AFTER THIS DATE.

eptember 4-7 - Constitutes the First Week For
efund Purposes.

eptember 5, Wednesday - Classes Begin.
eptember 7, Friday - Last Day for Graduate
tudents to Submit Proposals for Independent
tudy - Applications Available in Graduate Office
eptember 12, Wednesday - Last Day for Schedule
hanges. Last Day to Register For Fall Semester.
ast Day to Apply For May Graduation.
ctober 11, Thursday - Founders' Convocation.
ctober 27, Saturday - National Teacher Exams,
-4:30 p.m., P.E. 206-207.
ovember 16, Friday - Last Day to Withdraw From
A Course With a Grade of "W". All Schedule
Changes Must be Made in the Registrar's Office in
Speed Hall. Consult Graduate Catalog For Infor-
mation About Procedures and Financial Regulations
November 21-25 - Thanksgiving Vacation: No Classe
November 28 - December 7 - Advising and Advance
Registration for Spring Semester.
December 1, Saturday - M.A. Comprehensive Exam,
9 a.m. - 1:00 p.m., SC-112.
December 15, Saturday - Final Examinations for
Saturday Classes.
December 21, Friday - Last Day to Finalize
Registration For Spring Semester.
December 19-21- Final Examinations For Weekly
Classes.

Spring Semester, 1985

January 7, Monday - Academic Advising.
January 8, Tuesday - Registration. (Late Fee After This Date).
January 9, Wednesday - Classes Begin.
January 8-11 - Constitutes The First Week Refund.
January 11, Friday - Last Day for Graduate Students to Submit Proposals for Independent Study.
January 16, Wednesday - Last Day For Schedule Changes. Last Day to Register for Spring Semester. Last Day to Apply for August Graduation.
January 19, Saturday - Orientation for M.A. Comprehensives. 10:00 a.m., SC-212.
March 30, Saturday - NTE, 8:00-4:30 p.m., P.E. 206-207.
April 5-8 - Easter Vacation; No Classes. Last Day to Withdraw From a Course With a Grade of "W".
April 20, Saturday - M.A. Comprehensive Exams, 9:00 a.m.-1:30 p.m., SC-112.
April 22 - May 3 - Advising and Advance Registration for May Interim and Summer Sessions.
May 6, Monday - LAST DAY TO FINALIZE ADVANCE REGISTRATION FOR MAY INTERIM.
May 8-11 - Final Examinations.
May 12, Sunday - Commencement: 2:30 p.m.

MAY INTERIM, 1985

May 13, Monday - Registration. Classes Begin. (Late Fee After this Date).
May 14, Tuesday - Last Day for Schedule Changes. Last Day to Register for May Interim.
May 17, Friday - Last Day to Withdraw With a Grade of "W".
May 31, Friday - Final Examinations.

ummer, 1985 - First Session

une 3, Monday - Advising and Registration: 8:00
.m. (Late Fee After This Date). Students
ay Register for Both Summer Sessions.
lasses Begin on Abbreviated Schedule.
une 6, Thursday - Last Day for Schedule Changes.
ast Day To Register for First Summer Session.
rientation for M.A. Comprehensives - 4:00
.m., SC-210.
une 19, Wednesday - Last Day to Withdraw From
Course With a Grade of "W".
uly 4, Thursday - Independence Day. (Classes
leet as Usual).
uly 5, Friday - Final Examinations For First
ummer Session.

Summer, 1985 Second Session

July 5, Friday - Advising and Registration:
2:30 p.m. (Late Fee After This Date).
July 8, Monday - Classes Begin on Regular Schedul
July 11, Thursday - Last Day for Schedule Changes
Last Day to Register for Second Summer Session.
July 20, Saturday - M.A. Comprehensives- 9:00 a.m
1:30 p.m., P.E. 205.
July 24, Wednesday - Last Day to Withdraw From
A Course with a Grade of "W".
August 5-7 - Advance Registration for Fall
Semester.
August 9, Friday - Final Examinations for
Second Summer Session.
August 10, Saturday - Commencement:
10:30 a.m.

NOTE TO STUDENTS CONCERNING CHANGE IN REGULATIONS BEGINNING IN 1985:

Kentucky Students Entering A Graduate Program and Desiring Certification Beginning in the Fall of 1985, Must Earn 12 Hours in Their Area of Undergraduate Specialization or Related Field At the M.A. or 5th Year Level.

ADMISSION TO CANDIDACY

Admission to Candidacy for the M.A. degree and for the 5th Year Certificate requires formal application to the Office of Graduate Affairs and approval of the Graduate Council. The application is available in the Office of Graduate Affairs and must be filed when the student has:

(1) Shown an aptitude for graduate study by the completion of a minimum of 12 semester hours in residence with a grade point average of at least 2.50 for the 5th Year or 3.0 for the M.A. degree.
(2) Satisfied any deficiency in oral or written English that has been reported by a member of the faculty.
(3) Has successfully prepared a written exercise in the Office of Graduate Academic Affairs. The exercise must be written legibly with correct grammar usage and spelling. (The student may repeat the exercise twice if not satisfactory). Required of all candidates for 5th Year or M.A. program beginning the fall term 1984.

(4) Shown evidence of a valid teacher's certificate. The only exception to this is that a limited number of persons are accepted without teaching certificates as noted elsewhere.
(5) Taken the Core Battery of the National Teacher's Exam. The Core Battery of the National Teacher's Exam includes communication skills, general knowledge, and professional knowledge. Students should plan to take this exam before completing the first 12 hours of graduate work.
(6) A Planned Program of work on file in the Graduate Office.

INCOMPLETE GRADE

The Dean of Graduate Academic Affairs is given the authority (by the Graduate Council) to change a student's grade of "I" (incomplete) to a "W" rather than an "F", when in his judgment a grade of "F" is not justified.

ADMISSION TO THE GRADUATE STUDIES PROGRAM

(See Page 10 in the 1983-85 Catalog)

A change made by the Graduate Council in April 1984. in addition to the requirements stated in the catalog, included:

Students applying to the Graduate Studies Program must have 2 letters of recommendations: one from an administrator with whom they work and one from an individual who knows the student personally and professionally.

A screening committee representing each of the 4 major college divisions will review applications of students and recommend those possessing necessary entrance qualifications.

Two official transcripts of undergraduate and graduate work taken at other institutions must be filed in the Graduate Office three weeks prior to registration for the term the student desires to begin graduate work.

M.A. THESIS

(See Page 12-13 in Catalog 1983-85)

The Graduate Council has adopted specific guidelines for students enrolling in Education 599 (thesis). The guidelines are available in the Graduate Office.

EXPENSES AND FINANCIAL AID

Graduate Expenses (Regular Semester)

Graduate Tuition, per semester hour -$80.00
Full Time Tuition (10 or more hours) $1,950.00.
Activity Card (boarding students only) $25.00. Double Dormitory room (per semester) $265.00. Private dormitory room (per semester) $345.00. Board (19 Meal Week) $700.00. Married Student Apartment (per month, including utilities) $140.00.

Fees

Late Registration Fee*- $15.00.
Graduate Admission Fee - $15.00.
Graduate Fee (M.A. and 5th Year) $35.00.
Graduation in Absentia Fee - $25.00.
Transcript (after first free copy) $3.00.
Audit fee, per semester hour - $15.00.
National Teacher's Exam (Core Battery) $45.00.
M.A. Comprehensive Exam - $5.00.

Summer Expenses
(5 Week Summer Session)

Graduate Tuition, per semester hour - $80.00.
Board, (full tive weeks)** - $225.00.
(15 meals per week).
Room (Regular) - $80.00.
Room (Private) - $105.00.

Short term courses and workshops less than the time stated would have room and board charges prorated accordingly.

---

*Late registration fee can be waived by the Registrar for sufficient reason if permission is requested in advance.

**Board is subject to change pending contract agreements.

TERMS OF PAYMENT

Full semester's charges, room, board, tuition, and fees, must be paid no later than registration date. Should the student have an approved loan, scholarship, workship, workstudy grant or other form of financial assistance, such amount will be deducted from the total charges with the then net amount payable at the time of registration. The Office of Business Affairs can make no exception to this regulation. A student having any unpaid balance will not be cleared for the release of an official transcript, a transcript of credits, or a diploma.

Financial Charge

A monthly finance charge of one and a half percent (18% annual rate) will be added to any unpaid balance of a student's account during each semester.

PLEASE NOTE: Meal tickets are required if students live in the dorm unless special permission is granted by food service and business manager.

ADVANCED REGISTRATION

In case of advance registration, if financial arrangements are not completed by the date indicated on the class schedule, the advance registration will be removed from the computer and the registration procedure will have to be repeated.

REFUND POLICY

Since faculty contracts and other commitments are made by the college for the entire year in advance, the following refund schedule has been established in order that the college and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his/her program.

1. A student is considered to be enrolled until he or she completes drop/withdrawal procedures. These procedures must be completed in person or by mail. Necessary forms must be obtained from the Office of the Registrar. All refunds will be based on the date these drop/withdrawal forms are completed and returned to the Office of the Registrar.

2. Any student who has completed registration and has not attended a single class will get a full refund.

3. Any portion of board charges unused up to date of withdrawal will be refunded, except that a full week's board will be charged for any fraction of a week.

4. Tuition and room charges will be refunded on the following basis:

   REGULAR SEMESTER - Twenty percent of the total for tuition and room will be charged the first week, 40% the second week, 60% the third week, 80% the fourth week. No refund will be given after the fourth week. Any part of a week will be treated as a full week. Refund is based on tuition charges less $10 student center allocation, $1 class dues, $1 student senate fee, and $3 for I.D. card.

   SUMMER AND SHORT TERMS - Withdrawal up to the end of the first week will permit a 50 percent refund. No refund will be made after the end of the first week. Any part of a week will be treated as a full week.

5. Refund of Overpayment on Student Account - If a student makes an overpayment on his or her account, a written request for refund must be submitted to the Business Office within one year after the end of the last academic term for which the student was enrolled.

6. Room Reservation Deposit - This deposit will be refunded if the request is made in writing not later than August 1 for the Fall semester or 30 days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request to the Dean of Students at least 30 days before the end of the term, for cancellation of the contract. This

deposit will be refunded within 60 days upon receipt of written authorization by the Dean of Students indicating that the depositor is no longer enrolled as a student at Union College and that he or she has left the housing facility undamaged and does not owe other bills. The request for this authorization must be made within one year after the end of the academic term for which the student was enrolled.

Questions regarding refunds may be addressed to the Dean of Students or appealed to the Vice President for Student Affairs.

COMPUTING FACILITIES

Computer instruction and use are available to all Union College graduate students.

Academic computing is supported primarily by three types of microcomputer: Apple IIe, TRS-80 Model III, and TEK-Tronix. A total of twenty such computers are available for classroom instruction, laboratory exercise, and individual use by students and faculty. With such microcomputers becoming more readily available in public and private schools, an increasing variety of opportunities is being offered for teachers to use this Union College equipment to learn to use computers effectively in their teaching.

Administrative computer applications are supported by a Hewlett-Packard minicomputer located in the Data Processing Center on campus. The minicomputer is also used for student programming. Four offices in Speed Hall have remote terminals through which they enter and retrieve data. Terminals located in the DP Center are used for data entry and program development. In addition, a statistical analysis program is run on the HP system. This package is used by all Educational Research classes.

COURSE DESCRIPTIONS AND TITLES

Education 573 - Computers in Education. 3 semester hours. (Title Changed).

Designed for teachers, supervisors and administrators. A hands-on experience with microcomputer operation, introduction to BASIC, use of software, and information about instructional and management uses in schools. No previous experience with microcomputers required.

NEW COURSES

Edad 642 - Administration of Pupil Personnel Services - 3 semester hours

Emphasizes roles and responsibilities related to the organization and administration of pupil personnel services.

Edad 643 - Pupil Personnel Accounting And Records Management - 3 semester hrs.

Emphasizes systematic procedures in pupil personnel accounting and records management as related to the financing of public education and the protection of student rights.

RANK I - DIRECTOR OF PUPIL PERSONNEL PLANNED CURRICULUM*

The program of preparation for the Professional Certificate for School Administration and Supervision, endorsed for the position of Director of Pupil Personnel, shall consist of a minimum of 45 semester hours graduate credit, including the master's degree, and shall include the preparation marked with an asterisk below.

One must hold either the Standard Elementary Certificate for the Standard High School Certificate, and must have 9 hours from the courses listed below including Educ. 500 and Psyh. 600 unless taken at the M.A. level.

Educ. 502 - Curriculum Development
*Educ. 500 - Methods of Educational Research (required)
*Psyh. 600 - Advanced Human Growth and Development (required)
Psyh. 470G- Theories of Learning
Educ. 501 - History and Phil. of Educ.
Educ. 511 - Tests and Measurements

I. Professional Block - 9-12 sem. hours
(9 hours selected from above)
If all courses have been taken, appropriate selections may be made from Component II and III below.
**Educ. 670 - Directed Field Project

II. Specialization Component - 15-18 sem. hrs.
*Edad. 642 - Administration of Pupil Personnel Services - 3 hrs.
*Edad. 643 - Pupil Personnel Accounting and Record Management - 3 hrs.
*Educ. 401G- Introduction to Guidance and Counseling - 3 hrs.
*Psyh. 565 - Psychology of Exc. Child - 3 hrs.
*Educ. 574 - Computers in Educ. - 3 hrs.
Edad. 600 - School and Comm. Rel. - 3 hrs.
Edad. 630 - School Law - 3 sem. hrs.
Edad. 645 - School Org. and Adm. - 3 hrs.

II. Related Fields - 6-9 semester hours

Edad. 640 - School Finance & Business Management - 3 sem. hours

Hlth. 511 - The School Health Program 3 sem. hours

Psyh. 452G- Abnormal Psychology 3 sem. hours

Soci. 511 - Educ. Sociology - 3 sem. hrs.
Educ. 603 - Elem. School Curr. - 3 hrs.
Educ. 604 - Sec. School Curr. - 3 hrs.

*Required for certification for Director of Pupil Personnel
*Required for Rank I certification for Director of Pupil Personnel

Please note: When the courses marked with one asterisk above have been completed, the student is eligible for the certification-Director of Pupil Personnel, but in order to obtain Rank I the student must complete additional hours totaling 30 hours above the Master's, including 12 hours of 600 level courses.
Must have three (3) years successful teaching experience.

SCIENCE CURRICULUM (M.A.)
(Standard Secondary Certificate and Rank II)

(1) Professional Education - 9 semester hours
EDUC 500 and two courses selected from EDUC 501, 502, 511, or 525.

(2) Science Component - 12 semester hours

Students choosing to professionalize in one subject will take a minimum of 12 hours in that subject: those choosing to professionalize both a major and a minor subject will take a minimum of 6 hours in the minor. Three of these hours should be for a research investigation (595) unless the M.A. thesis option is chosen below.

(3) Electives - 9 semester hours

The M.A. thesis and EDUC 604 are recommended. However, other courses from area (1) or (2) above or from other academic disciplines may be chosen with approval of the Dean of Graduate Academic Affairs.

ENGLISH 552 - DELETED.

ENVIRONMENTAL STUDIES

ENVS 469G - The Appalachian Environment - 3 s. hrs.

Conservation of natural resources including soil, water, wildlife and forests as interrealted components of the environment. Current problems relating to the environmental quality of the Appalachian region. Prerequisities: Two courses in environmental studies or biology and some knowledge of economics.

Offered in Summers and on demand.

GENERAL SCIENCE

GNSC 525 - Science for the Elementary Grades

Application of modern learning theories and psychological foundations to the teaching of science in the elementary grades. Includes discussion of trends in science education, applications of research to teaching, and special probelms that occur in schools.

HEALTH

HLTH 411G - Deleted
HLTH 421G - Deleted
HLTH 451G - School and Community Health (Title changed)
HLTH 475G - (remains as stated in catalog page 30).
HLTH 511 - Deleted
HLTH 551 - (remains as stated in catalog page 30).
HLTH 582 - Safety Education (Title changed)
HLTH 595 - (remains as stated in catalog page 30).

MATH

MATH 531 - Topics in Modern Math for Elementary Teachers (offered Summers only).

MATH 532 - Modern Math Laboratory (offered Summers only).

SOCIOLOGY

SOCI 464G- Sociology of Deviance (Change in title)
This course will develop an understanding of the social definitions and implications of deviance. Various types of deviant behavior and relevant theories of society will be addressed.

GRADUATE COUNCIL 1983-84

H. Warren Robbins, Dean of Graduate Academic Affairs

Jan M. Finkel, Associate Professor of English

Arthur H. Hafner, Adjunct Professor of Education

A. James Kerley, Assistant Professor of Education

Jean L. Letch, Associate Professor of Education

Deril K. Mays, Professor of Psychology

Bettye G. Moody, Graduate Student Rep.

Paul S. Moore, Professor of Health and Physical Education

Jack C. Phillips, (ex officio) President

Virginia B. Saddler, Associate Professor of Library Sciences

Jane B. Skidmore, Graduate Student Rep.

Robert W. Swanson, Associate Professor of Environmental Studies

John C. Taylor, Associate Professor of History

Doris B. Thompson, Assistant Professor of Education

FACULTY

Santaram Chilukuri, Professor of Physics
B.S., M.S., Ph.D., Andhra University, India

Dianne R. Ferris, Associate Professor of English
B.A., University of Minnesota; M.A.,
Ph.D., University of Washington

Jan M. Finkel, Associate Professor of English
A.B., Wittenberg University; M.A.,
Ph.D., Indiana University

Mary Ann Ghosal, Assistant Professor of Mathematics
B.A., B.S., Missouri Valley College;
M.S.T., Illinois Institute of Technology;
Ed.S., University of Kentucky

A. James Kerley, Assistant Professor of Educ.
B.S., Tennessee Technological University;
M.A., The Citadel Military College;
Ph.D., Florida State University

Nazir Khatri, Assistant Professor of Chemistry
B.S., M.S., University of Karachi;
Ph.D., University of Nebraska

Jean L. Letch, Associate Professor of Educ.
B.A., Iowa State Teachers College;
M.S., Ed.S., University of Northern Iowa;
Ph.D., University of Iowa

Deril K. Mays, Professor of Psychology
B.S., Union College; M.S., University
of Kentucky; Ed.D., University of Tenn.

Paul S. Moore, Professor of Health and Physical Education
B.A., Union College; M.S., University of
Tennessee; Ed.D., University of Alabama

Francis E. Nussbaum, Jr., Professor of Biology
B.S., Ohio University; Ph.D., Michigan State University

Rebecca A. Pettys, Assistant Professor of Drama and Speech
B.A., Berea College; M.A. Northwestern University; Ph.D., Indiana University

Robert B. Pettys, Assistant Professor of Business
B.A., Michigan State University; M.B.A., Ed.D., Indiana University

H. Warren Robbins, Professor of Education
B.S., Eastern Kentucky University; M.A., George Peabody College for Teachers; Ed.D., University of Tennessee

Ronald B. Rosen, Assistant Professor of Biology
B.A., Hendrix College; M.S., Colorado State University; Ph.D., University of Manitoba

C. Ronald Rosenstiel, Assistant Professor of Sociology
B.A., M.S., M.A., Ph.D., University of Kentucky

Robert W. Swanson, Associate Professor of Environmental Studies
B.S., Purdue University; M.A., Ed.D., Indiana University

Joe E. Tarry, III, Professor of Music
B.MusEd., Murray State University; B.Church Music, Southern Baptist Theological Seminary; M.M., George Peabody College for Teachers; Ph.D., Flordia State University

John Craft Taylor, Associate Professor of History
B.A., Juniata College; J.D., Duke University; M.A., Ph.D., Pennsylvania State University

Doris B. Thompson, Assistant Professor of Education
B.S., Livingston University; M.A., Ph.D., University of Alabama

Andelys Wood, Associate Professor of English
A.B., Middlebury College; Ph.D., Indiana University

Lester G. Woody, Professor of English
B.A., University of Virginia; M.A., University of Richmond; Ph.D., University of North Carolina

ADJUNCT FACULTY

John H. Boyd
B.A., Western Kentucky State University; M.A., Ed.D., University of Kentucky

Robert L. Gatton
A.B., M.A., Union College; Ed.D., University of Florida

Arthur H. Hafner
Ph.B., Muhlenberg College; M.A., Lehigh University; Ed.D., Teachers College, Columbia University

Robert Hayes
B.A., Berea College; M.A., Eastern Kentucky University; Ed.D., University of Alabama

Joyce Sue Hopson
B.S., Lincoln Memorial University; M.A., Union College; Ed.D., Univeristy of Tenn.

James Reid Jones
B.A., University of North Carolina at Chapel Hill; Ph.D., University of Tennessee

Kenimer H. Morgan
A.B., M.A., Mercer University; Ph.D., George Peabody College for Teachers

Marshall E. Rasnake
B.S., Ed.S., University of Tennessee; M.A., Teachers College, Columbia University; Ed.D., Memphis State University

James F. Simpson
B.S., Cumberland College; M.A., University of Tennessee

Murrell P. Stewart
B.S., M.A., Eastern Kentucky University; Ed.D., University of Kentucky

John E. Yatros
B.S., Concord College, Virginia; M.A., West Virginia University; Ed.D., Indiana University

UNION COLLEGE

CATALOG 1985-87

CONTENTS

Welcome to Union College 1
History and Purpose 2, 3
Admissions 7
Finances 9
Financial Assistance 12
The Academic Program 25
Academic Services 31
Curriculum 33
Campus Information 89
Calendar 94
Administration and Staff 97
Faculty 98
Index 103

DIRECTORY FOR CORRESPONDENCE

Academic Program and Advisement ..... Vice President for Academic Affairs
Admissions Information ..... Director of Admissions
Admission to Graduate Program ..... Dean of Graduate Academic Affairs
Alumni Affairs ..... Director of Alumni Affairs
Charges and Payment of Bills ..... Business Manager
Gifts and Bequests ..... Vice President for Development
Personal Welfare, Health of Students, Housing ..... Vice President for Student Affairs
Grants, Scholarships, Work-study and Loans ..... Director of Financial Aid
Transcripts, Academic Records, Veterans Affairs ..... Registrar

TELEPHONE COMMUNICATION

A campuswide network of telephones enables the caller to reach any administrative or staff office by dialing the central switchboard. After 11 p.m., emergency calls for students may be directed to their dormitory counselors.

Central Switchboard ..... **(606)546-4151**
Counselor, Pfeiffer Hall ..... (606)546-3421
Counselor, Stevenson Hall ..... (606) 546-3659

Union College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools, the Kentucky State Department of Education, and is approved by the University Senate of The United Methodist Church.

It is the policy of Union College not to discriminate on the basis of sex, race, color, handicap, age, or national or ethnic origin in the admission of students, in its administration of educational programs, scholarships, loan programs, or other school-administered programs, or in athletic participation. Inquiries should be directed to Mr. Edward H. Black, Affirmative Action Officer.

While this catalog presents information as accurately as possible as of the date of publication, the College reserves the right to make such changes as future circumstances may require.

DR. JACK C. PHILLIPS

Welcome To Union College

We welcome you, and invite you, to examine Union College. Founded in 1879 by Barbourville citizens, and purchased in 1886 by The Methodist Episcopal Church, Union sees its principal mission as one of service to the Appalachian area of southeastern Kentucky, eastern Tennessee, and southwestern Virginia.

With an enrollment of over 900, including both graduate and undergraduate students, Union College is committed to excellence in its academic programs. The College offers the Bachelor of Arts, the Bachelor of Science, the Bachelor of Music, and the Master of Arts in Education degrees. It also offers a Rank I Program beyond the Master's level as well as various associate-degree and certificate programs.

Located on the historic Wilderness Road, Union College is the oldest college in this tri-state area. Union now has over 8000 graduates, with over 3000 of these having received the Master of Arts in Education degree.

We are proud of our tradition and optimistic about the future. I am pleased that you are interested in our College and hope that you will like what you see in these pages. In fact, we hope you will join us for many happy and profitable experiences.

Sincerely,

Jack C. Phillips

Jack C. Phillips
President

A History of Service

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880, the first building was formally opened on the site of what is now known as Centennial Hall.

The College was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson was made president of the reorganized institution. A major bequest from Mrs. Fanny Speed led to the construction of Speed Hall, Stevenson Hall, and the Classroom Building (now known as Centennial Hall).

The college department was discontinued in 1908, and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a *bona fide* College again in the presidency of Ezra T. Franklin, who inaugurated a program of development during which the Memorial Gymnasium and a home for the president were built. In 1927, the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. In 1931, Union was accredited by the University Senate of the Methodist Episcopal Church, and in 1932, full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. The Board of Regents of the University of the State of New York placed Union College on its accredited list in 1937.

In Conway Boatman's twenty-one years of leadership, the College achieved marked progress in both its educational programs and in plant improvement. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959. In 1960, a Master of Arts in Education degree program was introduced, and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center, was completed in 1973.

President Jack Carter Phillips began his duties at Union College in January, 1983.

Dr. Phillips earned the Bachelor's Degree at Birmingham-Southern College and the Master of Divinity Degree at Vanderbilt University. He received an honorary Doctor of Laws Degree from Union College in 1981. He was lauded at that ceremony for "notable achievement in the field of institutional fund raising and, in particular, service to the colleges and universities related to The United Methodist Church."

A native of Scottsboro, Alabama, Dr. Phillips served in the U.S. Marine Corps from 1954 to 1957.

The College has always accepted a special mission to Appalachia, a commitment which is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community-service projects, and new career-oriented curricula.

The doors of Union College are open to all who aspire to a more fulfilling life, without regard to race, color, sex, handicap, national or ethnic origin.

Interested and prospective students are encouraged to arrange a visit to the campus by calling the Admissions Office (606-546-4151).

STATEMENT OF PURPOSE
(Mission Statement)

Union College is an independent institution of higher education affiliated with The United Methodist Church. It is dedicated to maintaining an academic environment that stimulates intellectual curiosity and scholastic competence, encourages an understanding of and commitment to the Christian faith, and undergirds the development of the whole person, so that students will develop the human resources needed to live creatively and wholesomely in a changing world.

Students are admitted to Union College without regard to race, creed, age, sex, or physically handicapping condition. Although eastern Kentucky and the general mid-Appalachian region constitute the primary service area of the college, it is intended that a balance will be maintained by enrolling applicants from across the nation and around the world.

Union College is committed to providing a faculty characterized by sound scholarship, stimulating teaching, exemplary character, and a deep concern for the needs of the students. Classes are small, many teaching and learning options are provided, and opportunities for both professional and informal counseling and guidance are abundant.

Union College desires to provide a broad academic program to meet a wide variety of student and social needs and interests. The basic undergraduate liberal arts program of the college provides opportunities for preparation in the professions as well as general education in the humanities, arts, social studies, and sciences. Union College also has curricula at the certificate, associate degree, and graduate levels. These latter curricula are closely coordinated with regional manpower needs. Credit and non-credit continuing education offerings are available for persons seeking skills and/or desiring personal enrichment. Classes in all categories are offered on demand in various communities within the primary service area of the college in order to provide maximum convenience and minimum cost for students.

Union College affirms a special concern for improving the quality of life in Appalachia. The academic program provides undergraduate and graduate curricula in education that contain elements designed to address the unique needs of the public schools in the region. Appalachian regional studies make available to all interested students a basis for understanding the history and distinctive features of the region. The college's community service programs provide both on-campus and off-campus instruction in a variety of subjects for the educationally disadvantaged at the pre-college level as well as non-credit continuing education classes for the community at large.

In order to further the development of a free society of responsible individuals, Union College is committed to student involvement in institutional governance as an aid to the development of responsibility and leadership capabilities. Through student outreach programs a philosophy of life is encouraged that has a significant place for using one's time, talents, and resources in voluntary service activities.

A STATEMENT OF VALUES

Union College is dedicated to preparing students for living informed, socially useful, personally fulfilling, and spiritually vital lives. This commitment involves using knowledge within a context of Christian values. Although it is recognized that as an educational institution Union College has an obligation to help students understand other value systems and their effects when translated into specific areas of human activity, as a United Methodist Church-related college Union affirms an institutional stance based on Christian values such as have evolved in the Judeo-Christian tradition and are contained in the Old and New Testaments. Our intent is both to confess and to practice the Christian faith in all our endeavors.

IMPLICIT IN THIS STATEMENT OF VALUES IS THE REQUIREMENT THAT UNION COLLEGE COMMIT ITSELF TO THE VALUES ENUNCIATED BY ASSURING TO THE MAXIMUM EXTENT POSSIBLE:

To Its Students

(1) the fullest of opportunities to receive a quality liberal arts education.
(2) strong attention to, and genuine concern for, each individual in the college community, including emphasis upon the unique value of each person.
(3) a continuing concern that they learn to appreciate and accept life styles that reflect integrity, honesty, compassion, and social responsibility.
(4) a commitment to provide the experiences necessary to acquire a meaningful understanding of and dedication to Christian love and service to both God and neighbor.

To Its Faculty and Staff

(1) a campus atmosphere of responsible academic freedom dedicated to the constant search for truth.
(2) an academic community dedicated to openness and acceptance of its pluralistic composition, including personnel policies and practices that are recognized without regard to race, creed, sex, color, physical handicap, or national origin.
(3) a constant reminder of the power of Christian example.

To Its Alumni, Benefactors, and the Parents of Its Students

(1) faithful and responsible stewardship of all funds and gifts entrusted to the College.
(2) continuance of meaningful traditions, particularly those unique to a church-related institution, while at the same time encouraging the exploration and implementation of new value-centered activities especially of the type that have strong Christian relationship.
(3) continuing appreciation for the rich heritage of Union College as an independent, non-sectarian, church-related institution in the Christian tradition.

To The United Methodist Church

(1) acceptance of Jesus Christ as God's revelation of Himself, and of the Holy Spirit as God's continuing presence in life.
(2) acceptance of the moral standards which have evolved in the Judeo-Christian tradition as our ideals for living, working and witnessing in an academic community and as the standards for our teachings and personal example.
(3) sensitivity to and a conscientious effort directed toward the satisfaction of the spiritual needs and concerns of the college's students, faculty, and staff.
(4) meaningful responsiveness to and support for The United Methodist Church.

To Barbourville, Knox County, and the Appalachian Area

(1) continuing appreciation that Union College is an integral,social, educational, and spiritual part of the Barbourville and Knox County communities, and of Appalachia.
(2) dedication of the college's resources in teaching, research, and service to the enrichment of the communities of which Union College is a vital part.
(3) a commitment of the personal resources represented by the college's students, staff, and faculty to local churches of the immediate and larger community.

ADMISSIONS AND GENERAL INFORMATION

ADMISSION REQUIREMENTS

The minimum requirements for admission as a regular student at Union College are: A high school diploma from an accredited high school, or a high school equivalency certificate based on the GED tests, acceptable ACT or SAT scores, and two letters of recommendation.

The high school transcript should include 3 units of English, 2 of Mathematics, 2 of Social Studies, and 2 of Science. A foreign language is recommended.

Applicants who have previously attended college must have their college transcripts sent to Union. All college work will be considered when an admissions decision is made.

The College will decide on the admission of a student within one week of the receipt of all pertinent material: high school and/or college transcripts, ACT or SAT scores, and letters of recommendation.

High-School-Special Program

A student who has completed the junior year of high school may qualify for the High-School-Special Program. The student must have a "B" average and must pass all sections of the Placement Test given by the College to be admitted to the program. The student may then enroll for 6 hours or less in any one term for one-half the established summer rate. This scholarship terminates when the student graduates from high school.

Procedure For Admission

Application for Admissions

The application form may be obtained from the Admissions Office, Union College, Barbourville, KY 40906.

Enrollment Deposit

There is no application fee at Union College. All new students are required to pay an enrollment deposit of $25.00, normally by July 1, of which $15.00 is applied to tuition and refundable until August 1.

Secondary School Transcript

Each applicant must authorize the release of his or her transcript by signing the application form. The Admissions Office will write to the applicant's high school for an official copy of the transcript.

GED Acceptance

An applicant may be admitted on a high school equivalency certificate based on the General Education Development Tests, provided that the scores earned are equal to or above the minimum recommended for college entrance by the American Council on Education.

Entrance Tests

All candidates are required to take the American College Test (ACT) or the Scholastic Aptitude Test (SAT). Applicants should have the results forwarded to Union College. The Union College institution number is 1552 for the ACT and 1825 for the SAT.

A test application blank and bulletin of information may be obtained from the secondary school guidance office or from Union's Admissions Office.

Union College will record a summary of transfer credits, indicating the total number of hours accepted and the quality point average at the sending institution. Union accepts only transfer work in courses with a grade of "C" or above. This policy applies only to credits transferred on a course-by-course basis, not to junior college students who transfer entire degree programs.

The student's grade point average will be calculated solely on the basis of grades earned at Union College.

Advanced Placement

Students who have successfully passed one or more of the Advanced Placement Tests of the College Entrance Examination board may ask for advanced placement and credit when they submit their scores for application. The Office for Academic Affairs will decide on the amount of credit to be granted and the college course that may be omitted. Scores of 3, 4, or 5 are required for such action.

Classification of Students

Freshman	less than 32 semester hours
Sophomore	32 semester hours
Junior	64 semester hours
Senior	96 semester hours

Summer Orientation

A one-day Summer Orientation program is required for all students who are entering Union College for the first time.

The program includes placement testing, academic advising, advance registration, and financial counseling and is designed to help students make a successful transition to college.

Early Start Summer Program

A high-school graduate who has not attended college since graduation may be eligible for the Early Start Summer Program. The student must graduate in the upper 50% of his or her class and must have a minimum ACT English score of 16 or SAT Verbal of 410.

This student must enroll for 6 semester hours at Union each summer session preceding fall entry. Union College will provide a scholarship for one-half of the tuition charges. If the student lives on campus, there will be no summer room charge. All students must pay $50.00 refundable room deposit.

If the student's summer grades average 3.0 ("B" average), the student will receive a $250 scholarship as a full-time student in the fall. If the 3.0 average is maintained in the fall, the student will receive another $250 scholarship in the spring. After the spring semester, the scholarship terminates.

Two recommendations will be obtained by the Admissions Office from the persons named by the applicant on the application form. The applicant must give the full name and address of (1) the applicant's counselor, teacher or other officer of the school, and (2) a teacher, pastor, rabbi, etc.

Health Certificate

The required physical examination form is mailed by the Admissions Office and should be returned as directed.

Admission of Adult Students

Students 25 or older are not required to furnish ACT or SAT scores. Applicants who lack the GED are urged to contact Union's continuing and adult education office for assistance.

Admission of Foreign Students

Foreign students must complete the regular admission process (ACT or SAT is not required of foreign students). After the student is accepted, the College must receive payment for the student's first semester costs for tuition, room and board, and fees. This payment must be received at least one month before the beginning of the semester. The I-20 form will be issued when payment has been received.

In order to be considered for admission, a foreign student must show English proficiency with a minimum score of 500 on the Test of English as a Foreign Language (TOEFL), or 107 on the ELS English Proficiency, or 70 on the Michigan English Placement test.

When the admission process is completed, a foreign student is obligated to stay at Union for at least one year. No official transcript or recommendation will be released until the student fulfills the year's obligation. If a student leaves before one year, he must be reported to the Immigration and Naturalization Service. One year is interpreted as two full semesters, excluding summer sessions.

The student must pursue a full course of study. Those who drop to part-time status must by law be reported to the Immigration and Naturalization Service. No visas and/or passports will be renewed until the student's account is paid in full.

Transfer and Advanced Standing

Students transfering at least 30 hours of credit are excused from Entrance test requirements.

Credits earned from an accredited community college, junior college, senior college, or university can be transferred to Union College. Sixty-seven semester hours is the maximum amount of junior college or community college credit which may be counted toward a degree.

Transfer credits will be accepted at the level of the initiating institution. In case of an appeal for upper division credit when the course was taken at a junior college (or as lower division work at a senior college), a committee consisting of the Registrar, the division chairman of the area involving the course, and an appointed faculty member from that discipline will review the content, text, level of work, etc., to determine if the upper division credit should be granted.

FINANCIAL AID & FEES

TUITION AND FEES

College Expenses

The academic year of nine months is divided into two semesters and a May Interim term. The rates quoted below are for one semester. The cost of a regular session of nine months can be found by multiplying a semester's expenses by two. All checks should be made payable to Union College.

Undergraduate Expenses (per semester)

Tuition (10 to 17 semester hours).....$2,110.00
Room*.....$300.00
Private Room*.....$400.00
Board (19-meal week)**.....$725.00
Full Time Students
Activity Fee.....$25.00
Total for Boarding Student.....$3,135.00
Total for Non-Boarding Student.....$2,135.00
Part-time tuition for all registration under 10 or above 17 semester hours, per semester hour.....$95.00
(Undergraduate students over age of 50 pay 50% of the established tuition rate.)

Graduate Expenses

Full-time tuition (10 to 17 semester hours).....$2,110.00
Part-time tuition (per semester hour).....$95.00
Activity ID card (required for boarding graduate students).....$25.00

Summer Session Expenses+

Tuition, Undergraduate (per semester hour).....$95.00
Tuition, Graduate (per semester hour).....$95.00
Tuition, High-School-Special (per semester hour).....$47.50
Room, each term (double occupancy).....$90.00
Private Room, each term.....$120.00
Board (19-meal week) each term, 5 weeks**.....$236.25
Board (Sunday dinner through Friday lunch—15-meal week) each term**.....$190.00

May Interim Term Expenses+

Tuition, Undergraduate (per semester hour).....$95.00
Tuition, Graduate (per semester hour).....$95.00
Room (double occupancy).....$55.00
Private Room.....$75.00
Board (19 meal week**).....$140.00

Other Expenses

The fees listed below are not a part of the traditional tuition and board and room charges.

Audit Fee (per semester hour).....$15.00
Late registration fee***.....15.00
CLEP—Advanced Tests only (per test).....28.00
CLEP Credit Recording fee (per course equivalent).....25.00
Portfolio Fee (per semester hour).....25.00
Contract Course (per semester hour).....25.00
Examinations:
late final examination fee.....15.00
credit by examination [Institutional] (per credit hour).....25.00
Graduation Fees:
Associate degree or Diploma.....25.00
Bachelor's degree.....30.00
In absentia.....25.00
Music Lessons:
Part-time and Special Students (per semester hour).....80.00
Applied Music (per semester hour).....65.00
Private Lesson (Continuing Education) (per semester hour).....Varies
Transcript-after first copy (one week's notice required).....3.00
Student Teaching Fee.....100.00
Special Lab or Studio Course.....25.00
College Court Rental, per month (all utilities furnished).....160.00

*Vacation periods are not included in the above quotations. Dormitories and food service are closed during vacations and other periods as noted in the undergraduate calendar. The College reserves the right to entertain delegates to conventions and other related groups in the residence halls during vacation periods. Students will be notified in advance of such contemplated occasions and assurance given regarding the safeguarding of their

personal property during such occupancy. Each dormitory resident must also be a boarding student and purchase a meal ticket for the college cafeteria.

**All board charges are subject to change without notice, pending contract agreement with the food service.

***Late registration fee can be waived by the Registrar for sufficient reason if permission is requested in advance.

†Expenses for May and Summer Sessions are effective June 1, 1986.

Tuition, Fees and other expenses are subject to change. All changes will be announced in the class schedule or through the media.

PAYMENT POLICY

I. Financial Clearance

A student will be cleared for registration only if any previous balance has been paid. The new semester's account must then be paid in full, or a signed payment plan and first installment completed. Summer school and short sessions must be paid in full at the date of registration—no payment plan is permitted for summer or short sessions.

Authorized financial aid will be credited to the student's account and a payment plan set up for the balance. In case the financial aid is anticipated but not yet authorized, the student must pay as a first installment one third of the **total** costs.

A student having any unpaid balance will not be cleared for the release of an official report of grades, a transcript of credits, or a diploma.

II. Finance Charge

A monthly finance charge of one and a half percent (18% annual rate) will be added to any unpaid balance of a student's account at noon on the last working day of each month.

III. Payment Plan

If the new semester's account cannot be paid before registration, a payment plan signed by a dependent student and a parent (or by an independent student and spouse or cosigner) can be completed and a first installment paid down. The payment plan requires one-third payment on each of the following dates after which the student will be withdrawn from courses if the account is not paid up:

1. On or before fall semester or spring semester registration—one-third.

2. Due October 5th (fall semester) or February 5th (spring semester)—one-third + 1½%.

3. Due November 5th (fall semester) or March 5th (spring semester)—one-third + 1½%.

Students who owe a balance on their account after November 15th (fall) or March 15th (spring) may be subject to withdrawal procedures.

REFUND INFORMATION

Since faculty contracts and other commitments are made by the College for the entire year in advance, the following refund schedule has been established in order that the College and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his or her program.

1. A student is considered to be enrolled until he or she completes drop/withdrawal procedures. These procedures must be completed in person or by mail. Necessary forms must be obtained from the Office of the Registrar. All refunds will be based on the date these drop/withdrawal forms are completed and returned to the Office of the Registrar.
2. A full refund may be obtained for a class only if a student has never attended that class.
3. Any portion of board charges unused up to date of withdrawal will be refunded, except that a full week's board will be charged for any fraction of a week.
4. Tuition and room charges will be refunded on the following basis:

   Regular Semester—Twenty percent of the total for tuition and room will be charged the first week, 40% the second week, 60% the third week, 80% the fourth week. No refund will be given after the fourth week. Any part of a week will be treated as a full week. Refund is based on the tuition charges less $10 student center allocation, $1 class dues, $1 student senate fee, and $3 for I.D. card.

   Summer and Short Terms—Withdrawal up to the end of the first week will permit a 50 percent refund. No refund will be made after the end of the first week. Any part of a week will be treated as a full week.
5. **Refund of Overpayment on Student Account**—If a student makes an overpayment on his or her account, a written request for refund must be submitted to the Business Office within one year after

the end of the last academic term for which the student was enrolled.

6. **Room Reservation Deposit**—This deposit will be refunded if the request is made in writing not later than August 1 for the fall semester or 30 days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request to the Dean of Students at least 30 days before the end of the term, for cancellation of the contract. This deposit will be refunded within 60 days upon receipt of written authorization by the Dean of Students indicating that the depositor is no longer enrolled as a student at Union College and that he or she has left the housing facility undamaged and does not owe other bills. The request for this authorization must be made within one year after the end of the academic term for which the student was enrolled.
7. Enrollment Deposit—$15.00 will be refunded upon receipt of written request prior to August 1 for the fall semester or 30 days before the first day of class for any other academic session. Refund request should be submitted to the Business Office.
8. Questions regarding refunds may be addressed to the Dean of Students or appealed to the Vice President for Student Affairs.

FINANCIAL ASSISTANCE

Student expenses. In planning to attend Union College a student should expect the following typical expenses for an academic year: tuition and general fees $4,270, room $600, board $1,450, books and supplies $250. In addition, allowance should be added to these figures for personal expenses, medical insurance, transportation, and extra charges for special courses (such as laboratory fees, etc.). The Office of Student Financial Aid will consider the total costs for attendance, including the items listed above, when making a financial aid commitment.

Purpose of financial aid program. In addition to its own scholarship funds, Union College participates in all federal programs including the Pell Grant Program. Residents of Kentucky are also eligible to receive state tuition grants and loans. Information on Union College scholarships will be found on the following pages.

Students applying for financial aid are considered for all programs for which they are eligible. The amount of financial aid awarded is generally a combination of grant, loan, and employment, and is based on the financial need of the student. Need is determined by subtracting the resources of the student and the contribution of his or her parents from the total student expenses. The parents' contribution is estimated on the basis of the amount of their income and assets as well as a consideration of taxes, medical expenses, and other liabilities of the family. An independent, objective, nationally recognized method of analysis developed by the College Scholarship Service is used to evaluate the family's financial circumstances. All financial aid awards to students are determined by Union College's Office of Student Financial Aid.

Procedures for applying for financial aid. Students must apply for financial aid by submitting a Financial Aid Form (FAF) to the College Scholarship Service. Students applying by March 15 will have a greater opportunity. However, financial aid will still be available after this date. The FAF is used to apply for the Pell Grant, the Kentucky Tuition Grant, the Supplemental Educational Opportunity Grant (SEOG), College Work-Study, National Direct Student Loan (NDSL) and any institutional funds. The FAF may be obtained from a high-school guidance office or the Office of Student Financial Aid. Students should specify 1825 as the code number for Union College in the appropriate section of the FAF.

A Financial Aid Notification along with information about any aid offered will be sent from Union College to each student who applies.

Procedures for reapplying for financial aid. A student must reapply for financial aid each academic year. However, aid usually continues at the same level each year unless a

student's resources or the expected contribution of his or her parents change. All enrolled students receiving aid automatically receive information about applying for renewal awards. Other enrolled students should request applications by February 15.

In order to continue to receive financial aid, a student must be making satisfactory progress toward his or her degree. A student may be said to be making satisfactory progress during the first semester on academic probation. However, he or she is not considered to be making satisfactory progress should he or she continue on academic probation for a second consecutive semester, or fail to complete 50% of the courses for which he or she enrolls in any one semester. The maximum number of semesters for which financial aid may be received is ten.

Grants

Pell Grant—A program providing direct grants from the federal government. The student receives an eligibility report (as a result of his or her Financial Aid Form application) which can be submitted to Union College for payment. It is expected that the maximum amount for the Pell Grant for 1986-87 will be $2,100.

Supplementary Educational Opportunity Grant (SEOG)—A program designed by the federal government to assist students with exceptional financial need. The grant is permitted in a range from $200 to $2000 per year for students who demonstrate academic potential.

Kentucky Tuition Grants—The program provides grants to students who are residents of the Commonwealth of Kentucky and who demonstrate a need through the analysis of the Financial Aid Form application. The maximum grant for 1986-87 will be $1,700.00.

Employment

College Work-Study Program—If a student still requires financial support to meet college costs after the federal and state grants are awarded, the student may be awarded an amount to be earned on an hourly basis in a campus department. This employment program is campus-based support from the federal government. Either undergraduates or graduate students can qualify if the Financial Aid Form results indicate a need.

Work-Grant—If a student cannot qualify for employment on the basis of financial need and the College needs the special skills of the student, the student can work for an amount of tuition waiver.

Coop Program with Tremco, Inc.—is available to a qualified sophomore, junior, or senior majoring in chemistry.

Loans

National Direct Student Loan—Federal loan funds are made available to students who have financial need and who maintain satisfactory progress toward graduation. A congressional change in the regulations on July 1, 1981, requires that repayment at a 5% interest rate begin six months after graduation or withdrawal from school

KHEAA Guaranteed Student Loan Program—This loan program exists in Kentucky and other states as a way to borrow from private commercial lenders to finance college education on the undergraduate and graduate levels. Repayment at 8% interest begins 6 months after graduation or withdrawal. Minimum payments are $50.00 a month. Eligibility depends upon at least half-time enrollment status, a "C" average for undergraduate students, and a reporting of family imcome. The loans are insured by the state.

United Methodist Student Loan Fund—Students who are members of The United Methodist Church and maintain a "C" average may apply through Union College for a loan at 6% interest from the Board of Education of The United Methodist Church.

Charles M. and Mary D. Grant Loan Fund—The Charles M. and Mary D. Grant Foundation has provided an endowed loan fund for Appalachian students who demonstrate a real need and who are in good standing at the College.

Hensley Emergency Loan Fund—Mr. and Mrs. Burton F. Hensley of St. Cloud, Florida, have established a loan fund for single students at Union College who have emergency situations requiring small short-term loans.

The Rev. and Mrs. Erwin King Loan Fund—The Rev. and Mrs. Erwin King have established a loan fund to aid worthy

ministerial students in the junior or senior year at Union College.

Guy H. Williams Loan Fund— Dr. Guy H. Williams of Cleveland, Ohio, has established a loan fund in memory of his wife, Anna Williams. The fund is available to worthy students who have spent two years at Union College and have a "C" average or better.

The Beverly P. and Mossie B. Wilson Loan Fund—This loan fund has been established by Dr. and Mrs. O. J. Wilson of Louisville, Ky., in memory of Dr. Wilson's mother and father. The loans shall be given to students majoring in English and repayment shall be in accordance with the guidelines of the College's loan fund. The income from this fund shall come from the Beverly P. and Mossie B. Wilson Trust Fund.

The Charles Henry and Glennora Rominger Krieger Student loan Fund—This Loan fund, established by the late Glennora R. Krieger of Ft. Thomas, Kentucky, provides loans to worthy and needy students from the Appalachian counties of eastern Kentucky. The terms of the loan are the same as those of the United Methodist Student Loan Fund.

Other Loan Funds—Student loans are available from a number of funds not specifically designated for Union College students, but for which Union College students are eligible. Specific information may be obtained from the Office of Financial Aid.

Loan-Grants

Ministerial Loan-Grant—Ministerial loan-grants amounting to $500 for the academic year are available to students studying for the ministry. To be eligible for this aid the student must have a license to preach, or must enroll in the noncredit religion course, Conference Studies, which is designed to prepare candidates for obtaining the license to preach. Renewal of the loan-grant depends on the student's successfully passing this course and obtaining the license to preach before the beginning of the next academic year. Applicants qualified for the loan-grant must sign a note for the amount received each semester. These notes will be cancelled after the individual has entered the full-time ministry. If the student changes his plans and enters another field of endeavor, the notes become due and payable.

Loan-grants amounting to $700 for the academic year are available to United Methodist local preachers who agree to serve four years in the Kentucky or Louisville Annual Conference. These notes will be cancelled after the specified service has been fulfilled.

United Methodist Church Grants-in-Aid—Union College will provide grants of $500 for full-time United Methodist students and will request the student's home church to match the grant. If the student plans to go into the Methodist ministry or if the student is a dependent of a Methodist minister, then a $1,000 grant will be provided by the College. In each case, a request will be made to the local church to match the grant.

The grants are for one year, renewable, and may be applied to any Union College charges (tuition, fees, room and board on campus). A student is eligible for only one of the above grants.

College Employee Scholarships—Full-time employees of Union College are eligible for tuition remission scholarships. Their spouses and/or unmarried dependent children may receive one-half tuition scholarships. A tuition grant at other colleges participating in the Tuition Exchange Program is also available to employees' unmarried dependent children.

Full-time employees hired after January 1, 1975, will not be eligible for tuition scholarships for spouse or children until they have been employed for six months unless they are under annual contract. Dependent children are not given employee scholarships for graduate work. Eligible persons must apply at the Business Office at least one week prior to registration.

Assistantships

Senior Assistantships are made available annually in the academic divisions. The assistantships are open to students of outstanding scholastic ability who exhibit great promise of future usefulness and who are considering graduate studies with a view to entering college teaching. The duties of the Senior Assistants include occasional classroom lectures, research, remedial work with beginning students, assisting in laboratories, etc. The Assistants are expected to spend a minimum of twelve hours per week on the work assigned. The awards are made by the

Scholarship Committee upon recommendation from the division chairmen. Senior Assistants receive a stipend of $600 per year.

Scholarships

A full-time student who qualifies for scholarship assistance on a merit basis may be entitled to more than one of the following scholarships in any one academic year. The total amount of scholarship and other financial aid cannot exceed 100% of the annual college costs.

Valedictorians and Salutatorians are awarded $2,500 and $2,000 respectively. Students in the top 10% of their graduating class are awarded $500. Evidence of high-school rank must accompany the transcript, certified by the high school attended. These scholarships are renewable every year of the student's undergraduate program at the original amount, if a minimum cumulative grade point average of 3.5 is maintained, or at two-thirds of the original amount for a 3.0 minimum average.

Academic Scholarships based on ACT/SAT scores are available as shown in the chart below. These scholarships are renewable for succeeding years at the original amount if the student maintains a minimum cumulative grade point average of 3.5, or at two-thirds of the original amount for a 3.0 minimum average.

ACADEMIC SCHOLARSHIP CHART

ACT Scores	SAT Scores	Award
20	900	$600
21	950	$700
22	1000	$800
23	1050	$900
24	1100	$1,000
25	1150	$1,200
26	1200	$1,400
27	1250	$1,600
28	1300	$1,800
29 and up	1350 and up	$2,000

Junior College Scholarships in the amount of $500 are awarded to graduates of junior or senior colleges who have earned the A.S. degree with a grade point average (GPA) of at least 2.5 on a 4.0 scale. These scholarships are renewable in the senior year at $500 if the student maintains this average, or increase to $600 if the student increases his grade point average to 3.0.

Alumni Scholarships—The Alumni Association of Union College awards four scholarships annually on the basis of character, need, and evidence of future usefulness. Each scholarship is for $500. Recipients are selected by the Alumni Scholarship Committee.

Dr. and Mrs. Edward S. Amis Endowed Scholarships.—Dr. and Mrs. Edward S. Amis of Fayetteville, Arkansas, have endowed a scholarship fund at Union College. Dr. Amis received the Distinguished Alumni Award in 1985. The two $500 grants will be given annually to two full-time Christian-service students who excel in local church programs.

The George L. Bagby Scholarship/Loan Fund—The late Mr. George L. Bagby of Woodford County, Kentucky, established a student financial aid endowment totaling $405,000 including accumulated interest, and this supports both scholarships and loans for Kentucky students.

Bank of Harlan Scholarships—A number of scholarships are given annually to qualified students from Harlan County by the Bank of Harlan. The grants are determined according to financial need and academic excellence.

Barbourville Kiwanis Scholarship—The Kiwanis Club of Barbourville, Kentucky, has supplemented an educational fund originated by Mr. C.F. Heidrick and established a scholarship fund at Union College for promising students from Knox County, Kentucky.

Barbourville United Methodist Church Music Scholarships—Annually the First United Methodist Church of Barbourville, Kentucky, awards four scholarships of $200 (for a total of $800) to music students. Consideration is given for participation in the music program of the local church.

Bell County Scholarship—A friend of Union College from Bell County, Kentucky, has established a scholarship endowment with the income to be awarded annually to a Bell County student. This grant will be approximately $300 per semester.

Henry C. Black Memorial Scholarship—This scholarship of $250 is given as a memorial to Mr. Henry C. Black, a graduate of Union College, to a freshman graduating from high school in Kentucky or Tennessee.

John A. and Hannah P. Black Memorial Scholarships for Christian Workers—The

late Dr. and Mrs. Henry C. Black, of Johnson City, Tennessee, endowed a scholarship that provides an annual grant of $500 for a promising student who plans a life of service in The United Methodist Church.

Dr. and Mrs. James F. Blair Scholarship—Dr. and Mrs. James F. Blair of Barbourville, Kentucky, have endowed two $600 scholarships for students from Knox County, Kentucky. They are awarded annually to students in the sophomore, junior, or senior year.

The Daniel Boone Festival Cherokee Scholarship—The Daniel Boone Festival of Barbourville has established an annual $500 scholarship to a Cherokee student from Qualla Reservation, Cherokee, N.C.

The Annette and Berry Burnaw Scholarship Endowment—Given by James Burnaw, an alumnus of Union College in honor of his parents. The yield is designated for a student from Nicholas County, Ky. Should there be no qualified student from this area during a given year, the scholarship will be given to some other Kentucky student.

The Eulalia Serrano Cabrero Memorial Scholarship—Miss Carmen Cabrero, '64, Jacksonville, Florida, has established a scholarship in memory of Eulalia Serrano Cabrero, a 1964 graduate of Union College. The $300 scholarship available to a needy student of minority background interested in a service profession.

W.S. and Bess Carpenter Scholarship—Mr. and Mrs. W.S. Carpenter of London, Kentucky, provide annually a scholarship for a worthy freshman, preferably from southeastern Kentucky. The grant varies with need, but is in the $500-$700 range.

Dr. and Mrs. Carlo B. Cawood Memorial Scholarship—The late Dr. and Mrs. Carlo B. Cawood of Harlan, Kentucky, endowed a scholarship to be awarded to a Harlan County student, with preference being given to a student from the Harlan United Methodist Church. The scholarship may be renewed. The grant is $700 per year.

Mamie D. Chambers Endowment Fund—The late Mamie D. Chambers of Maysville, Kentucky, established an endowment fund, the income from which is used to help support grants to needy and deserving students.

The Davies Memorial Scholarship—The family and friends of Miss Ellen Davies and Dr. T.R. Davies have endowed a $1,000.00 scholarship to be awarded annually to a freshman or to an upperclassman with a "B" standing from Bell, Clay, Harlan, Knox, Laurel or Whitley County.

The Doan-Woody Scholarship—Oatis Doan of Harlan, Ky., has endowed a scholarship that provides an annual grant to a southeastern Kentucky student who has a 3.25 grade-point average. The grant, a memorial to Oatis Doan, Sr., is in honor of Mary H. Doan and Dr. Lester G. Woody, and may be renewed if the student maintains an overall grade-point average of 3.00 or better.

Dr. Robert M. Drew Endowment Fund—The Commission of Missions of the Hyde Park Community United Methodist Church, of Cincinnati, Ohio, has established an endowment fund in honor of the Rev. Dr. Robert E. Drew. This fund will be used for scholarship grants to foreign students.

Dr. Franklin Duncombe Memorial Fund—Mrs. Helen Duncombe of Haverford, Pennsylvania, has established an endowment fund in memory of her late husband. Income will be used to finance grants-in-aid for students planning to enter the United Methodist ministry.

Alfred I. DuPont Scholarship Fund—The late Mrs. Alfred I. DuPont of Wilmington, Delaware, established scholarships for needy students having high academic potential. Preference is given to students from the Appalachian counties of Kentucky and Appalachian regions in adjoining states.

E. Nettie Edinger Memorial Scholarship—The late Mr. Joseph Edinger endowed this scholarship in memory of his sister. The scholarship is awarded annually to a deserving and worthy student enrolled at Union College.

Dr. and Mrs. J. Edward Faulkner Memorial Scholarship—This $350 scholarship is awarded to a student who plans a life of service in the healing arts, with preference being given to a predental student.

The GAR Foundation Endowed Scholarships—The GAR Foundation has endowed scholarships for Appalachian students with priority being given to those from the Fifth Congressional District.

W. Glover Giles Memorial Fund—The late Mr. W. Glover Giles of Louisville, Kentucky, a trustee of Union College, established an endowment fund by gifts during his lifetime and by a bequest. Income is used to fund Honor Scholarships at Union College.

John O. and Harriet B. Gross Memorial Scholarship—Family and friends have endowed a scholarship. Dr. Gross was president of Union College during the years 1929-1938. The scholarship is awarded annually to a Kentucky senior student with preference being given to one from Northern Kentucky. The stipend and requirements are the same as for "United Methodist Scholarships."

Hugh and Joyce Haggard Memorial Scholarship—A scholarship fund memorializing Dr. Hugh E. and Joyce A. Haggard, and their children, Walter M. and Stephanie L., has been established by the parents and brother of Dr. Hugh E. Haggard. Income from the fund provides an annual scholarship for a full-time student at Union College. The $1,500.00 scholarship will be awarded to a worthy student on the basis of financial need.

Dewey and Rachel B. Hendrix Memorial Endowment—Dwight M. Hendrix, an alumnus of Union College and his sister, Mrs. Mary Katherine Hendrix Brashear of Hyden, Leslie County, Kentucky, have established an endowment to memorialize their parents. The endowment is designated for financial aid, with the income to assist needy and qualified students enrolled full-time. Students who are residents of Leslie County, Kentucky, are given preference. Should no one qualify, then the grants are to be given to students from the Appalachian Region of Kentucky.

Walter S. and Ida Cole Hudson Scholarship Fund—The late Ida Cole Hudson of Barbourville, an alumna of Union College, endowed, through a bequest, a fund to provide scholarships to students from Knox County, Kentucky.

Irene Hughes Scholarship—Miss Irene Hughes (AB '37; MA '63), Barbourville, Kentucky, provides an annual scholarship of $250 for a freshman girl, a graduate of Knox Central High School, who has been a member of the High School Honors English Class and who exemplifies Christian principles of conduct. The scholarship will be awarded by the Alumni Scholarship Committee.

Professor and Mrs. Millard L. Jordan Scholarship—Professor and Mrs. Millard L. Jordan of Lakewood, Ohio, have established a scholarship fund at Union College to aid worthy Appalachian students.

Junior Study Club Scholarship—The Junior Study Club of Barbourville, Kentucky, provides a $200 scholarship to aid worthy students from Knox County, Kentucky. The scholarship is awarded to a girl who graduated from a high school in Knox County and who is a junior or senior at Union College.

Kentucky River Coal Corporation Scholarship—A scholarship endowment has been established by the Kentucky River Coal Corporation, Lexington, Kentucky, for needy students from Knott, Leslie, Letcher, and Perry counties, Kentucky. Recipients must have a grade point average of at least 2.0 during their senior year in high school, or must have or maintain a grade point average of at least 2.5 at Union College.

Jeffrey W. Kronk Memorial Scholarship—Mr. and Mrs. Walter F. Kronk of Huntsburg, Ohio, have endowed a scholarship for a needy, qualified student for Geauga, Lake, or Astabula counties in Ohio, or from the Appalachian counties of southeastern Kentucky. The scholarship is in memory of their son, Jeffrey, who was enrolled at Union College from 1963 through 1967. Should there be no qualified students from these areas in any given year, the endowment income will be used to support the Lincoln-Civil War Collection at Union College.

Verna Noe Landrum Memorial Scholarship—Mr. John W. Landrum of Harrodsburg, Kentucky, has established a $500 annual scholarship at Union College in memory of his mother, Mrs. Verna Noe Landrum. The award is to go to a student from Harlan County.

W.B. Landrum Memorial Scholarship—Mr. John W. Landrum of Harrodsburg, Kentucky, provides annually a scholarship of $500 in memory of his father for a promising United Methodist ministerial student. The student benefited by this scholarship must exhibit outstanding personal attitudes of religious sincerity, devotion, and earnestness in purpose.

London Laundry Scholarship—The London Laundry & Dry Cleaners, London, Kentucky, has established an annual $300 scholarship to assist, during his freshman year at Union College, a student who has graduated from a high school in southeastern Kentucky.

Dorothy Lucas Memorial Fund—An endowment fund has been established in memory of Miss Dorothy Lucas, registrar of Union College for many years and beloved friend of students. The income from the fund is used to support various student-aid activities of the College.

The Magee Christian Education Foundation awards annually a scholarship for students entering Christian vocations or professions or to those of economic need who are of Christian commitment.

Gayle Miles Scholarship—An endowed scholarship has been established by friends and former students of the late Gayle Miles for students from Barbourville High School. Miss Miles taught at both Barbourville Elementary School and Union College.

John and Minnie B. McGaffee Trust Fund—Dr. and Mrs. O. J. Wilson of Louisville, Kentucky, have established the John and Minnie B. McGaffee Trust Fund for the purpose of providing financial assistance to worthy and needy preministerial students. The income may be used for grants or loans, with preference being given to students from the Appalachian Region of Kentucky.

Drs. Robert and Gertrude McGuire Endowed Scholarship—Drs. Robert and Gertrude McGuire, graduates of Union College, have established an endowed scholarship for a Union student having a financial need and maintaining a minimum of a B average.

National United Methodist Scholarships—The Board of Education of The United Methodist Church makes available annually several United Methodist Scholarships of $500. The awards are made on the basis of character, need, and scholastic ability. Only students having at least a "B" average are eligible.

Mr. and Mrs. Hiram H. Owens Memorial Scholarship—Mrs. Sampson B. Knuckles (Jean) and Mrs. Buford T. Clark (Eleanor) have endowed a scholarship for a Knox County student in memory of their parents, Mr. and Mrs. Hiram H. Owens. Mr. Owens was a well-known lawyer and Mrs. Owens (Georgia Black) was the daughter of James D. Black, a governor of Kentucky and a president of Union College.

Emory Evan Peter Memorial Endowment—The late Mrs. Laura P. Dickey of Louisville, Kentucky, established an endowment fund in memory of her brother, Emory Evan Peter. The income from this fund will be used to help finance the college student-aid program.

Donald Rankin Memorial Scholarship—Friends of Donald Rankin, a Union College student killed in Vietnam, have provided a scholarship that pays $300 annually to a young man from Kentucky. Basis for awarding the scholarship is need and the earnest desire for a college education.

The Marvin Robbins Endowed Memorial Scholarship—An endowed scholarship has been established in memory of Mr. Marvin Robbins, a graduate of Union College. The applicant must be an upperclassman who is a Bell County High School graduate. The selection will be based upon academic achievement and financial need.

E.O. Robinson Mountain Fund Scholarship—The E.O. Robinson Mountain Fund has established an annual scholarship program to assist needy students who reside in the Appalachian Region of eastern Kentucky. Students receiving these scholarships should give promise of being able to complete their academic work successfully. They should be and remain unmarried while receiving assistance from this scholarship. Qualified persons should apply to the Office of Financial Aid.

Sanders Honor Scholarships—The late Colonel Harland Sanders of Shelbyville, Kentucky, provided a number of honor scholarships annually. Mrs. Claudia Sanders, his widow, continues to provide them. The Sanders Honor Scholarships are limited to students who do not use tobacco and alcoholic beverages.

Sims Scholarship Fund—Reverend and Mrs. Harry C. Sims of West View, Kentucky, have established a scholarship fund at Union College to aid worthy students preparing for The United Methodist ministry.

The Catherine Faulkner Singer Memorial Scholarship—This $400 scholarship has been established by friends, alumni, and her daughter and son—Marcia and Donald—for

the son or daughter of an alumnus of Union College. The honoree was Director of Alumni Affairs from 1961 to 1978.

Cawood Smith Harlan County Scholarship—Dr. Cawood Smith, Harlan County attorney, has established an endowment for scholarships to be awarded to the son or daughter of miners from Harlan County, Kentucky. The recipient shall be a resident of Harlan County and is to be selected upon the basis of need, scholarship, and promise of future usefulness to the coal region. This annual grant shall total $2,400.

Margaret Carter Stacy Scholarship Fund—Margaret Carter (Mrs. Cortis K.) Stacy of West Liberty, Kentucky, has endowed a scholarship fund for the support of students from Morgan County, Kentucky, or for Appalachian students. Mrs. Stacy is a strong United Methodist with interest in higher education for the youth of Appalachia.

Dr. and Mrs. Charles B. Stacy Memorial Scholarship Fund—A scholarship fund has been endowed in memory of Dr. and Mrs. Charles B. Stacy of Pineville, Kentucky, for students from southeastern Kentucky. A long-time friend of Union College, Dr. Stacy had an abiding interest in the education of the Appalachian region.

The Steele-Reese Foundation Endowed Scholarships—The Steele-Reese Foundation of New York City has established a $100,000.00 endowment with the yield being designed for scholarships for qualified Appalachian students.

Lewis Ogden Stiles Endowment Fund—The late Mrs. Lewis Ogden Stiles of Waco, Texas, established this fund to memorialize her late husband, Lewis Ogden Stiles, and his first wife, Pearl Long Stiles, both faithful United Methodists of Irvington, Kentucky. The income from this fund will be used to finance grants-in-aid under the college loan-grant program to United Methodist students planning to enter the ministry of the Kentucky or Louisville Annual Conference.

The Walter B. and Geraldine G. Sutton Memorial Scholarship—An annual scholarship will be given to a Knox County student attending Union College. The selection will be determined by the student's need, academic ability, and promise of future usefulness. The endowment is provided by two daughters: Carla Sutton Combs and Lynn Sutton Prichard.

Lytle and Dorothy Swope Scholarship—Dr. Samuel G. Swope of Louisville, Kentucky, a trustee of Union College, and F. William Swope of Elizabethtown, Kentucky, have established a scholarship endowment as a memorial to their parents. Funds for the endowment came from their parents' estate. Up to four scholarships are awarded annually with grants of $800 each. Preference is given to students born in Kentucky, Ohio, or Florida.

Hulbert Taft, Jr., Memorial Scholarship—Mrs. Thomas C. Haydock, Sr., of Cincinnati, Ohio, has provided a scholarship endowment as a memorial to her late husband, Hulbert Taft, Jr. The income from the endowment will be used annually to provide one or more honor scholarships to needy students having high academic potential.

The Dot Tatman Endowed Scholarships—Four $250 endowed scholarships have been established by the Reverend Dr. Harold W. Tatman, Jr., in honor of his wife, Dot. The scholarships are to be given to freshmen and continue over the four-year period with preference to Kentucky female students. These scholarships will begin the fall semester of 1986.

The Teagle Foundation Appalachian Scholarships—The Teagle Foundation of New York City has established a number of scholarships for qualified Appalachian students. The foundation was established by Walter Clark Teagle, Rowena Lee Teagle, and Walter C. Teagle, Jr.

Edward Townsend Memorial Scholarship—Dr. Milton H. Townsend has endowed a scholarship with preference being given to a history and political science major. The grant is in memory of Dr. Townsend's late father.

TREMCO, Inc., Scholarship—A $1500 scholarship is awarded by TREMCO, INC., a division of the B.F. Goodrich Company, to an incoming freshman chemistry major with preference to a student from southeastern Kentucky.

Allan Tuggle Scholarships—Allan Tuggle, M.D., of Charlotte, North Carolina, an alumnus of Union College, has established a number of scholarships in mathematics and physics.

Several of the scholarships are awarded to entering freshmen on the basis of competitive examination. Other scholarships are

awarded to current students with majors or minors in mathematics or physics on the basis of academic achievement. Some of the scholarships may be in the form of work grants.

Union National Bank Scholarship—The Union National Bank of Barbourville, Kentucky, has established a half-tuition scholarship at Union College to aid worthy students from Knox County, Kentucky. It is awarded to a student graduating from a high school in Knox County, for the freshman year at Union College.

Vaughn and Melton Company Scholarship—This scholarship is given by Vaughn and Melton, Consulting Engineers of Middlesboro, Kentucky. An annual award of $500 for a student from southeast Kentucky whose high school and college scholastic record reflects the potential for making a major contribution to the quality of life of the region.

Harry C. Viall Memorial Scholarship—Mrs. Harry C. Viall of Barbourville, Kentucky, has endowed a memorial scholarship for a needy, qualified student with preference going to an individual from Knox County. The annual $1,300 scholarship is given in memory of her late husband, Harry, who was a prominent local businessman.

Mr. and Mrs. O. H. Viall Memorial Scholarships—The family of Mr. and Mrs. O. H. Viall of Barbourville, Kentucky, has established a memorial scholarship fund at Union to aid worthy students. The number and size of the scholarships vary according to student financial need.

The Robert E. and Ann Viall Endowed Scholarships—Mr. and Mrs. Robert E. Viall of Barbourville, Kentucky, have established endowed scholarships that provide $6,000 annually for worthy students from either Knox or Bell County.

William M. Wilson Memorial Scholarship—The late Mrs. Eva Oldfield Wilson of Barbourville, Kentucky, established a scholarship fund in memory of her deceased husband. The income from the fund will be used to provide an annual grant of $350 for a promising student preparing to teach in the elementary or secondary schools.

Dr. Henry M. Zimmerman Scholarship—The late Dr. Henry M. Zimmerman of Pompano Beach, Florida, established a scholarship endowment, for needy students of exemplary character who show promise of being able to contribute to the well-being of their country and their fellow man.

Endowments

The Russell M. Bennett Memorial Professor of Sociology Chair—Mrs. Helen Hunt Bennett gave $75,000 to Union in 1946 for the endowment of this professorship. An additional $2,000 was given for equipment for the Business Department.

Andrew and Emma Elizabeth Edinger Memorial Fund—This fund was established by the late Mr. Joseph Edinger in memory of his mother and father. The fund has been increased by other members of the family and the income designated for use in the maintenance of campus buildings.

James P. Faulkner Memorial Endowment—James P. Faulkner of Barbourville, Union College president from 1897 to 1905, gave property to the college, the sale of which produced $57,500. The income from this investment is used for salary support for a faculty member in philosophy.

The Raymond W. Gibson, Sr., Chapel Endowment—Mr. Raymond W. "Deacon" Gibson, Senior, of Danville, Kentucky, established a $50,000 endowment at Union College in 1979 for the upkeep and maintenance of the Conway Boatman Chapel. His son, Raymond W. Gibson, Jr., served as Campus Minister at Union College from 1974 to 1979. The late Mr. Gibson, a prominent layman in the Kentucky Conference of The United Methodist Church, was a long-time friend of Union College.

Dr. Frank A. and Mrs. Eleanor Gilbert Biology Faculty Endowment—Dr. and Mrs. Frank A. Gilbert have established a Biology Department Endowment to augment the salaries of the biology faculty. The annual supplement will be in addition to regular salaries. Dr. Gilbert is professor emeritus of biology at Union College.

Anna E. and John William Harris Memorial Fund—The late Dr. J. William Harris established a lectureship fund containing the sum of $30,000 in memory of his sister, Anna E. Harris, and his father, John William Harris.

Charles and Leona Jennings Memorial Funds—Dr. Charles M. Jennings of Marietta, Georgia, has established an endowment fund in memory of his parents, Charles and Leona Jennings, the income from which is to be used to provide an annual bonus to the head of the Department of Biology at Union College.

William Jones Endowment Fund—The late Mr. William Jones of Barbourville, Kentucky, established a fund, the income from which is designated for use by the music department to purchase recordings and musical scores.

Jeffrey Kronk Memorial Endowment—This endowment, established by the Senior Class of 1967, in memory of Jeffrey Kronk, a member of that class, will assist in purchasing books for Union College's Lincoln-Civil War Collection.

Francis Landrum Memorial Professor of Religion and Philosophy—The late Mrs. Obed J. Wilson established the Francis Landrum memorial professorship through a bequest of $50,000 in 1927.

Melanie Jean Martin Trust Fund—Dr. and Mrs. O. J. Wilson, of Bowling Green, Kentucky, have established a memorial fund in memory of their granddaughter. The income from the fund is used to purchase library books to support the work of the English department.

Pearl Sinnett Meyer Memorial Fund—The Rev. Dr. Jesse I. Meyer has established an endowment fund in memory of his wife, Mrs. Pearl Sinnett Meyer. The income from this fund is designated for the purchase of books for the Union College library.

Allan Tuggle Endowment Fund—Allan Tuggle, M.D., of Charlotte, North Carolina, an alumnus of Union College, has established a fund, which may be augmented from time to time, the income from which is designated for scholarships, awards, and instructional support in mathematics and physics.

Willson-Gross Lectures—The late Dr. and Mrs. James Willson of Floydada, Texas, established a lectureship endowment in memory of Dr. and Mrs. John Owen Gross. The purpose of the lectures is to bring annually to the campus distinguished speakers to discuss vital issues confronting the Christian student.

Colutha J. Taylor Wright Memorial Fund—The late Mr. J. S. Wright of Whitley City, Kentucky, established an endowment fund in memory of his wife, Mrs. Colutha J. Taylor Wright. The initial sum was $1,000.

Awards

Note: These awards are presented at the annual Honors Day Convocation. Some are academic in nature; to be eligible for such awards, students' academic records should not include any grades of "incomplete."

Alpha Psi Omega Award—given by the National Dramatics Honor Fraternity to the student who has contributed the most toward Drama at Union College.

Bjornstad Freshman Composition Award— given by Dr. William Bjornstad, a former faculty member of Union College, and Mrs. Bjornstad, to the student achieving the highest writing excellence in freshman composition courses as determined by the English department.

Governor James D. Black Senior Award—given by the late Mr. Pitzer D. Black of Barbourville to the senior student with the highest scholastic average for the year.

Blackwell Political Science Memorial Award—given by the late Dr. Robert Lee Blackwell to the senior majoring in history and/or political science showing the highest academic excellence in the field of political science.

Erwin S. Bradley History Award—given to an upperclass student with a major in history who has the highest scholastic average in overall grades in history earned at Union College.

Kathy Brick Memorial Award—given by her parents, Mr. and Mrs. Theodore F. Brick of Ohio, to the student showing the highest proficiency in competitive swimming.

Calculus Award—given by a friend of the College to the student with the highest cumulative average in all three calculus courses offered at Union.

Campus Ministry Award—given to the student who, by his or her actions, exemplifies selflessness and concern for the needs and well-being of others as determined by the office of Campus Ministry.

Chemical Rubber Company Freshman Chemistry Award—given by the Chemical Rubber Company Press of Boca Raton, Florida, to an outstanding freshman student in recognition of outstanding scholastic achievement in chemistry.

Chemistry Department Awards—given in Analytical and Organic Chemistry by the chemisty faculty of Union College to the students who have completed those chemistry courses with the best overall average.

Dr. Theodore R. Davies Senior Biology Award—given in memory of the late Dr. Theodore R. Davies to the senior student showing the highest academic excellence in the field of biology.

Eastern Kentucky Essay Award—given by the late Dr. Kenneth H. Tuggle, a trustee of Union College, to the student writing the best essay on eastern Kentucky history.

Engineering Award—given by a friend of the College to the student with the highest cumulative average in pre-engineering courses.

Evans Phillips Plummer & Company Scholarship Award—given by Evans Phillips Plummer & Company, C.P.A.'s of Barbourville—an annual $500 scholarship to be awarded to the most promising sophomore accounting major. The scholarship is to be used in the fall semester. The recipient also receives a plaque and a cash award.

Gamma Beta Phi Award—given by the Gamma Beta Phi National Honor Society to the full-time student with the highest cumulative average in hours earned at Union College.

Dr. L.A. Geiss Computer Award—given by Dr. and Mrs. L.A. Geiss to the student exemplifying excellence in computer information systems.

Dr. L.A. Geiss Junior Award— given by Dr. and Mrs. L.A. Geiss to the junior majoring in accounting with the highest cumulative standing in that field.

Dr. L. A. Geiss Senior Award—given by Dr. and Mrs. L.A. Geiss to the graduating senior majoring in business with the highest cumulative standing in that field.

Dr. Albert D. Graham, Jr., Social Studies Award—given by Dr. Albert D. Graham, Jr., to the senior majoring in an area of Social Studies who shows the greatest teaching potential in Social Studies as selected by the Union College Education Department.

The Greek Award—given by Dr. Robert D. Matthews to the student showing the highest academic excellence in koine Greek.

Health and Physical Education Award—given by the Union College Health and Physical Education Department to the senior major with the highest cumulative academic standing.

Iota Sigma Nu Freshman Award—given by the Iota Sigma Nu Honor Society to the freshman with the highest scholastic average for the year.

Iota Sigma Nu Sophomore Award—given by the Iota Sigma Nu Honor Society to the sophomore with the highest scholastic average for the year.

H.B. Jones Business Enterprise Award—given in memory of Mr. H.B. Jones to the student who has shown initiative and enterprise in the field of business.

Steve Jones Memorial Award—given in memory of Steve Jones, a Union College graduate, to the Senior Varsity Letterperson with the highest cumulative academic average.

The Literature Award—given by the Tuesday Club of Barbourville to the student majoring in English who shows the greatest excellence in the field of literature.

Mathematics Award—given by a friend of the College to the graduating senior math major who has the highest cumulative average in math courses.

Samuel A. Matthews Memorial Award—given by Dr. Robert D. Matthews to a junior or senior preministerial student whose life and work show the promise of Reverend Samuel A. Matthews' fifty-year ministry in the Southern Illinois Conference of The Methodist Church.

Dr. Mahlon A. Miller President Emeritus Award—given by Dr. and Mrs. Mahlon A. Miller to the senior with the highest cumulative average earned at Union College.

Rena Milliken Award—given in honor of Miss Rena Milliken, Professor Emeritus of Business at Union College, by the Union College Business Department to the graduating senior who shows the greatest potential for professional achievement.

Dr. Paul Muncy Memorial Award—given by the Board of Trustees and members of the Muncy family to the senior pre-medical student with the highest cumulative academic standing.

Music Faculty Award—given by the Union College Department of Music and Fine Arts to a music major for interest, initiative, cooperation, musical ability, academics and service to the department.

National Education Association—Student Program Award—given by the Union College Chapter of the National Education Association—Student Program to the graduating senior showing the greatest excellence in the field of education.

H.H. Owens History Award—given by the late Mrs. H.H. Owens to the student showing the greatest excellence in the field of history.

Laws and Esten Parks Award—given by Dr. S. Laws Parks, former Vice President for Business Affairs at Union College, and Mrs. Parks, to the senior religion major with the highest cumulative academic standing.

Phoenix Award—given by the Drama and Speech department of Union College to the student who has contributed the most to theatre at Union College in the academic year.

Physics Award—given by a friend of the College to the student showing the greatest excellence in the general physics course.

Sampson Political Science Award—given by the late Governor Flem D. Sampson to the junior showing the highest academic excellence in the field of political science.

William Hugh Smith Memorial Award—given in memory of the Reverend William Hugh Smith to a pre-ministerial or Christian-service student (with preference being given to a Christian-service student) who shows promise of future usefulness.

Hattie Stanberry Ecology Award—given in memory of Hattie Stanberry, an alumna and former faculty member, to the student or organization that has made a contribution to environmental improvement in the academic year. If there is no qualified candidate, the $50 stipend shall go to the College's Soccer Club, or, if there is none, it shall go to the Annual Fund.

Thomas Storrar Memorial Award—given in memory of Thomas Storrar, former director of Union College's food services, by the Circle K Fraternity to the student who exemplifies the honesty, concern, and personal commitment to the Union College community that was displayed by Mr. Storrar.

Student Activities Appropriations Committee Student Organization Achievement Award—given by the Student Activities Appropriations Committee to the campus organization which, in the committee's opinion, has contributed the most toward campus activities during the academic year.

Student Center Board Award—given by members of the Student Center Board to the senior member(s) contributing the most during the year to the Board and to student activities at Union College.

Katherine V. Sutphen Memorial Award—given in memory of Katherine V. Sutphen, a former faculty member of Union College, to the student who has used his or her talents best during the year in serving the Union College Music Department.

Theta Pi Delta Award—given by the Union Express and Stespean staffs in honor of Dr. Frances Patridge, Vice President for Student Affairs at Union College, to seniors who represent the qualities of outstanding service exhibited by Dr. Patridge.

Judge W.W. Tinsley Family Memorial Award—given by the late Mrs. Mayo Tinsley Rathfon to the junior or senior preparing for a legal career showing the greatest promise of future success.

TREMCO, Inc. Award—given to the junior majoring in chemistry showing the highest academic excellence as determined by the science faculty.

Union College Women's Club Centennial Award—given by the Union College Women's Club to the campus organization that is most active in planning and implementing programs in keeping with its purpose, social or professional.

Beverly P. and Mossie B. Wilson Memorial Award in English—given by Dr. and Mrs. O. J. Wilson in memory of Dr. Wilson's parents, to the English major with the highest cumulative grade point average who has completed three full years of residence at Union College.

Dr. Cecil H. Wilson Junior Award—given by Dr. Cecil H. Wilson, an alumnus and trustee of Union College, to the junior with the highest scholastic average for the year.

John Henry Wilson Sophomore Award—given by Mrs. Guy D. Attkisson of St. Petersburg, Florida, the granddaughter of the late John Henry Wilson of Barbourville, to the sophomore from the Fifth Congressional District of Kentucky who has the highest scholastic average for the year.

THE ACADEMIC PROGRAM

Academic Calendar

Union College operates on a semester system. The Fall semester begins in early September and ends before Christmas. The Spring semester runs from January to early May. The college has a special three-week May interim session as well as two five-week summer terms.

Course Load

The normal undergraduate student load is sixteen semester hours per semester. Students who have an average academic standing may register for a maximum of eighteen semester hours credit per semester. Students who attain a "B" average are permitted to earn up to twenty-one semester hours per semester. Exceptions must be approved by the division chairman of the student's major.

The maximum load in each summer term is generally six semester hours. Students whose cumulative grade point average is "B" or better may request permission from the division chairman to take seven hours a term.

Class Attendance

1. Class attendance is required. Each student is responsible for all work from the first day of class and is expected to attend all meetings of the class for which he is registered. This is regarded as a matter of individual student responsibility.
2. All faculty members are expected to keep accurate records of class attendance.
3. Class absences due to circumstances beyond the control of the student will be excused by the teacher involved if the request is made within one week of return to campus. Class work or tests in these classes must be made up.
4. Class work and tests missed due to illness of a student can be made up only when the student presents the teacher with a valid excuse when he returns to class.
5. Class work and tests missed by a student while he is participating in an activity sponsored by Union College may be made up only when the faculty sponsor of such an activity signs the official absence list of students.

Withdrawal From Courses

A student is not automatically withdrawn when he stops attending a class. Official withdrawals are made only on forms provided by the Registrar's Office. It is the student's responsibility to complete this form, obtain the signatures needed, and return it to the Registrar's Office. Failure on the part of a student to follow this withdrawal procedure will result in a grade of "F" for the term.

Course Numbering System

Courses numbered 100 or 200 are intended primarily for lower division students and 300- and 400-level courses are generally reserved for upperclassmen. Freshmen or Sophomores desiring to enter 300- or 400-level courses should confer with the division chairman involved for permission to enroll. 500-level courses are restricted to graduate students.

Courses with hyphenated numbers (101-102) are used when the first semester is prerequisite to the second.

Reserved Course Numbers

Some Special numbers are reserved for specific types of courses or studies. They may be used in any department although they are not shown in the following pages under the specific listings.

001-099	Non-credit special interest courses.
181,281,381, 481,581	"Special Topics" courses—classes developed on a one-time or experimental basis, or a special innovative class.
282,482,582	Special workshops, credit or non-credit.
183,283,483, 583	Television courses through Kentucky Education Television Network
184,284,384, 484	May interim courses not listed under a regular catalog number.
285,485	Experiential Education—Study abroad, internships, cooperative work experience and vocational work experience.
287,487	Field Practicum in specialized areas.
495,595	Independent Study—individual research on approved topics not found in traditional courses. May be repeated on different topics.

Special Notations

Each course description indicates the semester the course will be offered—(F) for Fall Semester, (S) for Spring Semester, and (Sum) for Summer Session.

Many regular year courses are offered in summer sessions but are not guaranteed offerings.

Courses indicated as being offered in "Even Years Only" are offered on an alternate year basis in academic years *beginning* with even numbers, as 1978-79—"Odd Years Only" courses are offered on an alternate year basis in academic years *beginning* with odd numbers, as 1979-80.

Students should consult regularly with their advisors to ensure proper progress toward their degree. During the junior year, a final planned curriculum is prepared which constitutes a contract for the courses remaining to be completed in order to earn the degree. It is the student's responsibility to initiate the process of developing the planned curriculum.

The Grading System and Quality Points

Marks are reported in letters as follows:

A—Represents distinctly superior work, valued at four quality points for each semester hour.

B—Represents above average work, valued at three quality points for each semester hour.

C—Represents average work, valued at two quality points for each semester hour.

Cr—Indicates that a course has been passed satisfactorily.

D—Represents inferior but passing work, valued at one quality point.

F—Indicates failure with 0 credits and 0 quality points for each semester hour or failure to officially withdraw from a course.

W—Indicates that a student withdrew during the first 12 weeks of the semester.

I—Indicates that in the opinion of the instructor the student has not been able to complete the required work of the course on time due to unavoidable circumstances.

NP—Indicates No Grade Posted—For Developmental Studies courses only.

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolled for that term. If the student is not enrolled, the "I" must be removed before the end of the 12 month period following the date on which the "I" was received. Any exceptions to the time limit must be made by agreement of the instructor, division chairman, and Registrar. If an "I" is not removed within that time limit, it remains on the permanent record and cannot be made up.

Quality Point Standing

The quality point standing of a student is determined by dividing the total quality points which he has earned by the total number of semester hours for which he has registered minus the number of hours of Credit and Incomplete on his record.

Credit/Fail System

Students may take two courses per academic year (July through June) on a Credit/Fail basis. Only two courses may be taken in a single discipline. A student must apply in the Registrar's office for the Credit/Fail option no later than the Friday following mid-term. When the instructor turns in a letter grade at the end of the semester, a "D"or above will be recorded as "Credit". An "F" will be recorded as such. This option encourages students to take courses they otherwise might not attempt and where they fear the grade might lower their grade point average. The semester hours earned by "Credit" count, but no quality points are earned. Once this option is chosen it may not be changed. No developmental course or a course which is required for a students major or minor can be taken Credit/Fail. This option may not be used for English 111 and 112.

Examinations and Reports of Marks

Examinations are held at the close of each semester. Tests are held at such times during each semester as the instructors may determine. Mid-semester and semester grades are reported by the instructors to the Registrar. Mid-semester grades are mailed to students' advisors as soon as possible, and

students are urged to obtain these grades from their advisors. Where permission to mail grades to parents has been given, grades of students receiving a grade of "D" or "F" at mid-semester will be mailed to home addresses ten days after classes resume following the mid-semester break. Copies of final semester grades are given to students and, where permission has been granted, mailed to parents. Only final grades become a part of a student's permanent record.

Grade Appeal

Students are entitled to redress any greviences relative to grades. Please refer to the student handbook or contact the Office of Academic Affairs.

Honor Students

Union College recognizes excellent scholarship in three ways: The Dean's List, the Presidential Laureates, and graduation with honors.

The Dean's List is comprised of those students who have completed at least 12 hours of graded work with a 3.25 grade point average and no grades of "I" for the semester. This list is published after the fall and spring semesters.

Presidential Laureates are those students who meet all requirements for the Dean's List and achieve at least a 3.75 grade point average for two successive semesters with at least 12 hours of graded work and no grades of "I" in each semester. The two summer sessions may be counted as one of these semesters if the minimum hours have been earned. The list of students designated as Presidential Laureates is published after the fall and spring semester.

Appropriate certificates are given in recognition of both of these achievements, and graduation honors are noted on the diplomas of those receiving degrees with distinction (described on page 00 of this catalog).

Probation

Students falling below the following grade point average and corresponding minimum semester hours will be placed on Academic Probation:

Freshmen 1.80
Sophomores (32 hours) 1.90
Juniors (64 hours) 2.00
Seniors (96 hours) 2.00

Probationary students are closely monitored by the Academic Standing Committee of the College. Students who are on academic probation may be restricted as to courses taken, be required to repeat courses in which low grades have been earned, lose Union College financial aid, or be suspended from the College.

Academic Amnesty

Students having received a grade point average (GPA) of less than 2.0 in a semester may apply once only to the Registrar for academic amnesty after having completed two consecutive semesters of 12 hours or 12 hours of summer work with a minimum GPA of 2.0. Course titles and grades remain as previously recorded on the academic record. Credit will be given for courses with grades of "C" or higher. None of the grades in the semester for which academic amnesty is granted will be used in calculating the GPA. Transfer students bringing less than a 2.0 GPA or having received any form of academic amnesty at another institution do not qualify for any amnesty option at Union. Students who receive amnesty will not be eligible for academic honors based on cumulative GPA.

Students who have been out of school for two years or less may be readmitted on a conditional basis and apply for academic amnesty after completing two consecutive semesters of satisfactory (2.0) work. Students who have been out of school more than two years will be treated as transfer students.

Credit By Examination

1. The student will apply for credit by examination at the Office of Experiential Education. An initial screening interview will be conducted and the division chairman and appropriate faculty member will be consulted to determine if an evaluation seems feasible.
2. If an evaluation is feasible, the student will take a completed application form to the faculty member and arrange for an evaluation date. The faculty member will prepare an evaluation procedure, carry out the evaluation, and report the results to the Office of Experiential Education.
3. Reported results will include a recommendation as to whether or not credit should be awarded and a description of

the evaluation procedure and student performance. This material will be maintained on file in the Office of Experiential Education.

4. The recommendation and evaluation description will be forwarded to the division chairman or a designated representative for review. If the division representative does not concur, the faculty member, designated representative (if there is one), and the division chairman will meet with the Director of the Office of Experiential Education to seek a resolution.
5. Successful completion of a challenge examination will be reported to the Registrar by the Director and will be recorded as "Credit" on the transcript. An unsuccessful challenge will not be recorded.
6. Students enrolled in a course may request a challenge examination only within the period when a new course may be added.
7. Challenge examinations may not be used for developmental courses, to repeat a course, or remove an "F" from the transcript.

Transfer and Correspondence

Any student planning to graduate from Union College must receive permission from the Registrar to register for correspondence courses. Credits cannot be recorded unless prior arrangements are made.

Students enrolled for a full-time program of study shall defer work on all correspondence courses during the term for which they are registered.

Not more than twelve semester hours of correspondence work done in one academic year will be accepted by the College. Not more than one-fourth of the courses in a major may be completed by correspondence. Not more than thirty-two semester hours of correspondence credit will be accepted toward a degree.

Not more than six semester hours of correspondence may be accepted during the senior year. Students with sixty semester hours or fewer at Union may offer six semester hours non-residence in the last thirty-six; students with sixty-one semester hours or more may offer six semester hours out of the last twenty-four.

Failures or quality point deficiencies in any course done in residence cannot be removed by transfer credit, correspondence or Independent Study.

Graduating seniors must complete any correspondence work needed for graduation at least four weeks before the date of Commencement.

Graduation Requirements

Requirements for Graduation—Bachelor Degrees—Arts, Music, and Science.

The candidates must satisfy the following requirements:

1. Minimum of 128 semester hours. Thirty of the last thirty-six must be earned in residence at Union College. Students who have earned as many as sixty-one semester hours at Union College may graduate with only eighteen of the last twenty-four hours earned in residence. At least forty semester hours must be in courses numbered 300 and above.
2. Quality point standing of 2.00 overall and at Union, and in all courses taken in the major or minor fields.
3. Completion of the Liberal Education Core.
4. The equivalent of 12 semester hours of a single foreign language not native to the student is required for the Bachelor of Arts Degree. Equivalency shall be determined by the successful completion of the fourth college course of the language. Students with prior training in that language at the high-school level may be eligible for advanced placement in the sequence of courses and meet the requirement with fewer than twelve credit hours.

   Religion majors may substitute a year of Hebrew and a year of Greek for the language requirement for the Bachelor of Arts degree.
5. For the Bachelor of Science degree the student must meet all graduation requirements, including a major or area. A foreign language may or may not be required as determined by the individual discipline.
6. Completion of either:
   a. A major as determined by the faculty of the individual discipline.

      Majors are offered in Accounting; Biology; Business Administration; Business Education; Chemistry; Christian Education; Church Music; Computer Information Systems; Drama;

Drama and Speech; Elementary Education; English; Health Education; History; Mathematics; Mining Management; Music; Music and Busines; Music Education; Office Administration; Physical Education; Physics; Psychology; Religion; Secondary Education; Sociology.

Minors are offered in Accounting; Appalachian Studies; Biology; Business Administration; Chemistry; Coal Mining Technology; Computer Information Systems; Drama; Drama and Speech; Economics; English; Environmental Studies; Health Education; History; Mathematics; Music; Office Administration; Philosophy; Physics; Psychology; Religion; Sociology.

b. An area, the structure of which is detemined by the faculty of the Division in which the area requirements are met.

Areas are offered in Business; English; Journalism; and Science.

7. At least forty semester hours offered for graduation must be earned in junior and senior courses (300 and above); at least six semester hours 300 and above, earned at Union, must be included in any twenty-four hour major; at least twelve semester hours 300 and above (evenly distributed in the two fields if this is a combined major), earned at Union, must be included in a thirty-hour major; at least eighteen semester hours 300 and above earned at Union must be included in an area.
8. At registration each senior must specify the tentative date on which he expects to graduate.
9. Advice in arranging schedules and choosing courses is always given gladly; however, each student is responsible for completing all requirements.

Associate Degrees—see specific program requirements

Combined Degrees

The bachelor degrees may be granted to students who have completed three years of work at Union College and one year of work in an accredited professional school, with the following provisions:

1. The work in the professional school must continue the curriculum in which the student has been enrolled at Union College (pre-law, pre-dentistry, pre-medicine, etc.).
2. The student must have completed satisfactorily the minimum requirements for three years of pre-professional work at Union College (ninety-six semester hours with a quality-point standing of a least 2.00) and also the general college requirements for graduation, including the foreign language requirement if a B.A. is desired.
3. The student must have completed satisfactorily the minimum requirements for one year of study at the accredited professional school in which he is enrolled. The number of credits at the end of the four years of study must total at least 128 semester hours.

Degrees with Distinction

Honors in scholarship are recorded on the diplomas of the students earning them. There are three grades of honors designated respectively: *cum laude, magna cum laude,* and *summa cum laude.* These honors are conferred at graduation upon students who satisfy the following conditions of scholarship:

The honor of *cum laude* is awarded to those students who have earned an average standing of 3.5 overall and at Union.

The honor of *magna cum laude* is awarded to those students who have earned an average standing of 3.75 overall and at Union.

The honor of *summa cum laude* is awarded to those students who have earned an average standing of 3.9 overall and at Union.

Students coming from other colleges may receive general honors on completing 61 semester hours of resident study and satisfying the conditions of the scholarship prescribed by the faculty, provided they furnish also such evidence of high scholarship in the institution from which they come as may, in the judgment of the faculty, entitle them to become candidates for honors under the regulations.

As a reward for excellence in scholarship and to promote diligence in study and encourage high ideals, the honorary scholastic fraternity of Iota Sigma Nu was founded on May 26, 1936. Membership is open upon election to:

(a) All who have met the requirements for graduation with honors.
(b) All students who have at least 74 hours with a 3.2 quality point standing or 100 hours with a 3.0 quality point standing and who have completed a minimum of two years (64 semester hours) in residence at Union College.

ACADEMIC SERVICES

Career Planning, Academic Advising, and Placement Services

Upon Admission to Union College, students will begin a process whereby career planners and faculty advisors assist them to articulate their career goals, to select academic courses of study appropriate to those goals, and to achieve suitable placement upon completion of their studies. A student should therefore be assured of a smooth transition from high school to the academic environment of Union College with the appropriate services available throughout the student's college days and afterwards.

Undecided Majors

Students who have not made a vocational or professional choice will be assigned an advisor in the Career Counseling Office. Once a choice is made, the student will be reassigned to a faculty advisor in the appropriate discipline.

Planned Curriculum

At the beginning of the junior year, a planned curriculum will be developed by the division chairman at the student's request. This is an agreement between the College and student. Once the curriculum has been completed only changes approved by the Registrar are binding on the College.

Tutoring Center

The Tutoring Center offers tutoring to students in most freshmen and sophomore level courses. Tutoring is done by trained peer tutors, selected through faculty recommendation, superior academic achievement and personal interviews. Students should request help as soon as they experience difficulty in a class. There is no fee for the tutoring services.

For more information on Academic Advisement, special services, and counseling, contact the Director of Special Programs.

Micro Computer Labs

Micro Computer Labs are located in the Mahlon Miller Science Center as well as the Centennial Hall Classroom Building for student and faculty use.

Developmental Studies

The Developmental Studies Program is designated to help students become more successful in their college studies. Through this program Union College has recognized that each entering student has different strengths and weaknesses. **It is the sum total of these strengths and weaknesses that leads to either success or failure in college study.** Some of the common weaknesses are in reading, writing, and math skills, as well as in personal skills such as time management, goal setting, and decision making.

The College has developed mandatory courses for students who score

1. below 80% on the English Placement Test,
2. below 80% on the Math Placement Test,
3. below 11 on the Nelson-Denny Reading Test,
4. below 75 on the Coopersmith Self-Esteem Scale and above 9 on the Norwicki Strickland Locus of Control Scale.

Students with composite scores of below 20 on the ACT or 900 on the verbal and quantitative sections of the SAT are required to take these placement tests before being assigned an advisor and registering for classes.

Students who are not required to take the developmental courses listed below may elect to take one or more of them after consultation with their academic advisor.

The mandatory courses include the following four courses, each carrying 3 semester hours of credit:

1. **English 110**—is designed to provide training in college-level language skills and to prepare students for English 111 and other introductory courses.
2. **Mathematics 100**—is intended for students who need to improve their arithmetic and elementary algebra skills prior to taking other mathematics courses or courses requiring quantitative reasoning. The course includes a brief review of whole number arithmetic (particularly prime factorization, exponents, and perfect squares), and extensive review of fractions, decimals ratio and proportion, percent, and an introduction to algebra (including arithmetic of integers, algebraic expressions, and linear equations).
3. **General Studies 101**—is designed to help students increase their reading levels to more effectively handle the reading loads required in college. The student's reading level will be evaluated thoroughly to determine the entry level.
4. **General Studies 102**—is designed to increase students' academic and personal confidence through two components. The first will aid students to improve their study and time-management abilities. The second will present decision-making skills that will enable students to clarify their goals, values and interests, allowing them to make effective decisions throughout their life.

Continuing and Public Service Education

Continuing Education at Union College provides courses and workshops that satisfy a wide range of educational needs for adults. These courses provide an opportunity to study a variety of subjects for personal enrichment, to acquire skills for career advancement, or to enjoy cultural and leisure activities. Continuing Education emphasizes learning as a lifelong experience. The close student-to-instructor rapport that characterizes Union College adds an exciting dimension to this learning experience. Continuing Education attempts to meet the special educational needs of adults through a variety of forums, e.g., short courses (including Elderhostel), seminars, workshops, and conferences. The program also provides opportunities for students to earn continuing education credits and college credit for telecourses available through Kentucky Educational Television.

Adult Education

The adult education program is sponsored by Union College in conjunction with the Kentucky Department of Education. This program enables adults who have not completed their high school diplomas to prepare for the G.E.D. In addition, the JTPA (Job Training Partnership Act) for Knox County is located on the Union College campus.

Other externally funded programs include Upward Bound and Special Services.

Library and Learning Resource Center

The Abigail E. Weeks Memorial Library houses a collection of approximately 80,000 volumes. More than 350 periodicals are regularly received, along with indexing services to facilitate their use. The Library is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the Library, and freshmen students are given instruction in the use of library facilities. In addition, the College's library collections include a special Lincoln Civil War collection containing over 1,000 volumes, a curriculum library for the Department of Education, and a music library with a collection of more than 3,500 recordings and musical scores.

The Learning Resource Center supplements the printed materials of the Library with a broad range of non-print media, including slides, audiotapes, videotapes, filmstrips and kits. In addition to providing educational materials for classes and individualized instruction, the Center offers production services such as graphics, and prepares special media presentations. There is computer equipment available for use by students and faculty. The LRC staff also instructs students and faculty in the use of equipment and materials.

CURRICULUM

MAJORS AND DEGREE PROGRAMS

A college major is actually a means to an end—the means by which a student prepares for a future career, entrance into graduate school, or some change in his life style. Union College offers a wide range of majors and minors, as part of the Bachelor's degree and a number of certificate and 2-year Associate degree programs for those not needing a full 4-year degree.

DEGREE AREA	BA/BM/BS Major	BA/BS Minor	Assoc. Degree	Certificate	Program
Accounting	•	•	•		
Business Administration	•	•	•		
Business and Music	•				
Business Education	•				
Computer Info. Systems	•	•	•	•	
Economics		•			
Medical Secretarial Admin.			•		
Office Administration	•	•	•	•	
Elementary Education	•		•		
Middle School Certif.				•	
Secondary Education	•				
Vocational Education			•		
Health Education	•	•			
Physical Education	•				
English	•	•			
Journalism					•
Drama	•	•			
Drama and Speech	•	•			
Church Music	•				
Music	•	•			
Music and Business	•				
Music Education	•				
Christian Education	•				
Philosophy		•			
Religion	•	•			
Appalachian Semester				•	
Appalachian Studies		•			
History	•	•			
Pre-Law					•
Psychology	•	•			
Sociology	•	•			
Biology	•	•			
Chemistry	•	•			
Coal Mining Technology		•	•		
Environmental Studies		•			
Mathematics	•	•			
Medical Technology					•
Mining Management	•				
Physics	•	•			
Pre-Dentistry					•
Pre-Engineering					•
Pre-Medicine					•
Pre-Optometry					•
Pre-Pharmacy					•
Pre-Physical Therapy					•
Pre-Veterinary Medicine					•
Science Education			•		

GRADUATE, COOPERATIVE, AND INTERDISCIPLINARY PROGRAMS

Graduate Program in Education

Union College offers a unique graduate program designed for in-service teachers in the public schools. The College grants the 5th year certificate for Kentucky teachers, the M.A. degree in Education with emphasis as a reading specialist, in elementary education, general secondary education, health, kindergarten education, English, social science, and natural science. Work beyond the Masters level leading to certification as an elementary or secondary school principal is available. Many courses are offered off-campus.

Qualified holders of the Bachelor's degree should contact the Dean of Graduate Academic Affairs for brochures, catalogs, and information about the graduate program.

Cooperative Programs

Bellarmine College (Nursing)

A cooperative arrangement between Union College and Bellarmine College provides registered nurses from the eastern Kentucky area an opportunity to pursue a bachelor's degree in nursing at Union College. Selected liberal arts and elective courses are taught by Union College faculty; professional nursing courses are taught by Bellarmine College faculty on the Union College campus. Clinical experiences are offered in the area.

The B.S.N. Degree is conferred by Bellarmine College. This program offers the registered nurse an opportunity to receive a B.S.N. without leaving eastern Kentucky. Estimated completion time for the program is four years on a part-time basis.

Interested persons should file Union College and Bellarmine applications. An official transcript and a copy of the RN license should accompany the application to Bellarmine. Students must meet the general standards of both Colleges.

For more information, contact the Admissions Office at Bellarmine College at 1-800-633-5114.

Sue Bennett College

Union College also has a cooperative agreement with Sue Bennett College, a private two year United Methodist College located in London, Kentucky (25 miles from Union's campus). Under the agreement, Union offers junior, senior, and graduate level courses in education and business on the Sue Bennett Campus. This agreement also facilitates the articulation of transfer credit and provides scholarships for qualified Sue Bennett students who transfer to Union.

Oak Ridge Seminars

Since 1968, a series of special honors seminars has been conducted at the Oak Ridge (Tenn.) Institute of Nuclear Studies for selected majors in biology, chemistry, physics, and social sciences. These students under the direction of the Oak Ridge Institute's professional staff, conduct experiments with specialized equipment in the realm of nuclear studies. Arrangements are planned that will provide summer employment at the Institute as research assistants for qualified students of the member colleges.

Appalachian Studies

Reflecting the College's primary mission of improving the quality of life of the Appalachian people, Union offers a multi-faceted Appalachian Studies Program. One or more components of the program should be of interest to all students. The program seeks to develop an appreciation of the people, culture, and socio-economic conditions of the mountain area; to provide opportunities for direct service, research and personal experience in the region; to provide the skills and critical understanding needed to work in this area; and to help the student develop an understanding of himself and others.

The program at present consists of the Appalachian Semester and Environmental Studies, each outlined in detail below, and of various academic courses, identified in appropriate departmental and division course listings. The student will find an interdisciplinary approach to the history, politics, music, natural resources, economics, and other aspects of the region, which will stand him in good stead no matter where he or she may live later.

Appalachian Semester

The Appalachian Semester, which is operated during the fall semester, is a unique interdisciplinary academic program in which mature second semester sophomore, junior, and senior students from Union College and other institutions throughout the United States devote their full time to studying the Appalachian region—its strengths, problems and challenges. Students earn a total of fifteen semester hours of academic credit. Nine hours of credit are offered in sociology at the upper division level, and six hours are offered at either the lower or upper division level for field work in a variety of disciplines. Field work may be either experiential learning of a regional nature in a local service agency or other institutional setting, or it may be directed study in the region at large. The program is designed to combine interdisciplinary classroom experiences and on-the-scene community experiences into a "living-learning" situation where total involvement of students and faculty may take place.

Opportunities are provided to discuss with local and regional leaders assets and problems of the region, and field trips are coordinated with seminar discussions in order to involve participants on the spot with current regional issues. Following an orientation of approximately four weeks, students leave the campus and learn through independent study or work in a variety of private and public service settings.

Course descriptions are included in the curriculum section of this catalog. Detailed information and application forms are available from the Coordinator, Appalachian Semester, Union College.

Environmental Studies

Union College conducts a variety of environmental programs for students, teachers, and other community leaders, focusing on the unique challenges of the Appalachian region as well as on questions of current national and global concern. The undergraduate program is supported by an Environmental Studies Minor.

THE LIBERAL EDUCATION CORE

I. BASIC COMPETENCIES **12-13 hrs.**

A. FRESHMAN COMPOSITION 6 hrs
ENGL 111 Freshman Composition 3
ENGL 112 Freshman Composition 3

B. MATHEMATICS 3-4 hrs
MATH 108 Intermediate Algebra 3
MATH 111 College Algebra & Trigonometry 4
MATH 203 Structure of the Number System 3
BHSC 245 Basic Statistics 3

C. PHYSICAL WELL BEING 3 hrs.
HLTH 131 First Aid & Safety 3
HLTH 270 Personal & Community Health 3
or
Three Phed. Activity Courses 3

II. HUMANITIES **12-13 hrs.**

A. LITERATURE (Western) 3

B. FINE ARTS APPRECIATION 3-4 hrs
ART 132 Introduction to Art 3
DRAM 131 Introduction to Theatre 3
MUSC 121 Introduction to Music 3
MUSC 161 Foundations of Music 4

C. LITERATURE/FINE ARTS ELECTIVES 3 hrs
An additional course from B above or one of:
ENGL 221-222 Survey of English Literature 3
ENGL 241-242 Major American Writers 3

D. RELIGION AND PHILOSOPHY 3 hrs
RLGN 111 Old Testament History, Literature & Interpretation 3
RLGN 112 New Testament History, Literature & Interpretation 3
RLGN 231 Life & Teachings of Jesus 3
PHIL 151 Introduction to Philosophy 3

III. HIST. SOCIAL & BEHAVORIAL SCIENCES **9 hrs**

A. HIST 130 Survey of Western Civilization I 3

B. HISTORY ELECTIVE 3 hrs
HIST 131 Survey of Western Civilization II 3
HIST 201 U.S. History to 1865 3
HIST 202 U.S. History since 1865 3

C. SOCIAL SCIENCE—STRUCTURE ELECTIVE 3 hrs
ECON 153 Macroenonomics 3
GEOG 101 Introduction to Geography 3
PLSC 101 American National Government 3
PSYH 111 Introduction to Psychology 3
SOCI 131 Introduction to Sociology 3
ANTH 221 Introduction to Cultural Anthroplogy 3

IV. NATURAL SCIENCES **7-8 hrs**

Choose two courses from areas A, B, or C; each of the courses must be in a separate area (among the A, B, & C options).

A. BIOLOGICAL SCIENCE 3-4 hrs
BIOL 111 Introduction to Biology 4
BIOL 233 General Botany 4
GNSC 109 Ecological & Organismal Biology 3

B. PHYSICAL SCIENCE 3 hrs
PHYS 101 Survey of Physics 3
PHYS 111 Elements of General Physics 3
Chem 111 General Chemistry 3

C. ENVIRONMENTAL/EARTH SCIENCE 3-4 hrs
ENVS 101 Man & The Environment 3
ENVS 110 Physical Systems of the Environment 4
GNSC 114 Astronomy 4

D. LABORATORY EXPERIENCE 1 hr
(If not already included in A, B, or C above)
GNSC 110 Ecological & Organismal Laboratory 1
(GNSC 109)
ENVS 103 Man & The Environment Laboratory 1
(ENVS 101)
PHYS 103 Survey of Physics Laboratory 1
(PHYS 101)
PHYS 113 Elements of General Physics 1
(PHYS 111)
CHEM 131 General Chemistry Laboratory 1
(CHEM 111)

V. COMPLETION OF CORE **6-7 hrs**
Select a course from two of the following 3 areas.

A. COMMUNICATIONS/LANGUAGES 3
FREN 111 or 112 Elementary French 3
GRMN 111 or 112 Elementary German 3
SPAN 111 or 112 Elementary Spanish 3
SPCH 131 Fundamentals of Speech 3
SPCH 231 Interpretative Reading 3

B. SOCIAL SCIENCE—PROBLEMS ELECTIVES 3 hrs
ECON 154 Microeconomics 3
GEOG 241 Geography of Appalachia 3
HIST 233 History of Appalachia 3
PLSC 101 American National Government 3
PLSC 231 International Politics 3
SOCI 241 Sociology of Appalachia 3
SOCI 251 Current Socio-Economic Problems 3
SOCI 271 Marriage & Family 3

C. NATURAL SCIENCE 3-4 hrs
Select a course from section IV not used to satisfy the Natural Science requirement.

Students are expected to complete this core during their Freshman-Sophomore years. Some majors such as education require specific courses. Consult your advisor.

ACADEMIC DIVISIONS

DIVISION OF APPLIED SCIENCE

Paul S. Moore, *Chairman*
Department of Business Department of Education
Department of Health & Physical Education
Military Science (ROTC Program)

I. DEPARTMENT OF BUSINESS

Robert V. Pettys, Acting Department Head
Accounting—Business Administration—Business Education
Computer Information Systems—Economics—Office Administration

BACHELOR OF SCIENCE DEGREES IN BUSINESS

In addition to the general college requirements, all candidates for the Bachelor's degree must complete the following courses in one of the major fields listed below. Students with a major or minor in Business must have a 2.0 average for all courses in each major or minor. (Students who choose to complete the foreign language requirement may elect to receive a Bachelor of Arts degree.)

Common Courses Required of All Candidates		*Semester Hours*
ACTG 271, 272	Principles of Accounting	6
BUAD 321	Principles of Marketing	3
BUAD 351	Principles of Finance	3
BUAD 352	Principles of Management	3
BUAD 311 or 312	Business Law	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153, 154	Principles of Economics	6
		27

and, as applicable:

Accounting Major		*Semester Hours*
ACTG 371, 372	Intermediate Accounting	6
ACTG 331	Cost Accounting	3
ACTG 376	Tax Accounting	3
ACTG 471	Advanced Accounting	3
ACTG 430	Accounting Theory	3
ACTG 433	Auditing (in addition to core requirement)	3
BUAD 311 or 312	Business Law	3
OFAD 302	Business Communications	3
	Choice of Computer Language (COBOL OR RPG)	3
		30

Business Administration Major		*Semester Hours*
BHSC 245	Basic Statistics: Theory and Application	3
BUAD 372	Personnel Management	3
BUAD 451	Business Policy	3
OFAD 302	Business Communications	3
	Choice of Computer Language	3
	Electives from the Department of Business	12
		27

Computer Information Systems Major *Semester Hours*

COMP 221, 222	Program Development I and II	6
COMP 331	Systems Analysis Methods	3
COMP 332	Structured Systems Analysis and Decision	3
COMP 425	Applied Software Development	3
COMP 441	Data Base	3
COMP 231 or 235 or 250	Second Computer Language	3
	Computer Elective (300 or 400 level)	3
BHSC 245	Basic Statistics: Theory and Applications	3
MATH 108 or 111 or 241	Mathematics Course	3 or 4
And one of:		
OFAD 301 or	Business English: Theory and Application	
PHYS 101, 103 or	Survey of Physics (with lab)	
PHYS 110, 112	Fundamentals of Physics (with lab)	3 or 4

Office Administration Major *Semester Hours*

BUED 290	General Office Accounting Procedures	3
BUED 431	Office Practice	4
OFAD 112	Intermediate Typewriting	3
OFAD 211	Advanced Typewriting	3
OFAD 122	Intermediate Shorthand	3
OFAD 301	Business English: Theory and Applications	3
OFAD 302	Business Communications	3
OFAD 361	Office Management	3
	Elective from the Department of Business	3
		28

Business and Music Major *Semester Hours*

BUAD 272	Salesmanship	3
OFAD 302	Business Communications	3
	Upper division business elective	3
	Field Placement	3-10
MUSC 161-162	Foundations of Music	8
MUSC 261-262	Harmony	6
MUSC 111-412	Applied Music	8
MUSC 322	Music History	3
MUSC 171, 172, 173, 175	String, Woodwind, Piano, or Brass Class (Choice of any 3)	3
		40-47

BACHELOR OF SCIENCE DEGREE IN BUSINESS EDUCATION

Students should see the Education Department section for Certification Requirements.

Teaching Major in Basic Business *Semester Hours*

ACTG 271, 272	Principles of Accounting	6
OFAD 302	Business Communications	3
BUAD 311 or 312	Business Law	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153 or 154	Principles of Economics	3
BUED 431	Office Practice or Office Internship	3
OFAD 111, 112	Elementary and Intermediate Typewriting	6
BUAD 352	Principles of Management	3
BUED 362	Methods of Teaching Basic Business Subjects	3
		33

Teaching Major in Secretarial Skills		*Semester Hours*
ACTG 271 or 272	Principles of Accounting	3
OFAD 302	Business Communications	3
COMP 131	Introduction to Computer Information Systems	3
ECON 153 or 154	Principles of Economics	3
BUED 431	Office Practice or Office-Internship	3
OFAD 121, 122	Elementary and Intermediate Shorthand	6
OFAD 111, 112	Elementary and Intermediate Typewriting	6
	Business Elective	3
BUED 361	Methods of Teaching Secretarial Business Subjects	3
		33

For endorsements in other business subjects, see the head of the business or education department.

ASSOCIATE OF APPLIED SCIENCE DEGREES IN BUSINESS

The following two-year programs lead to the award of the A.A.S. degrees in the emphasis indicated. Union College provides a "career ladder" approach to learning in that students who complete these degrees may immediately apply the credits earned on the two-year degree toward a Bachelor's degree, or return to college later with the guarantee that the credits previously earned at Union will apply toward the 4-year degree.

Common Courses Required of All Candidates		*Semester Hours*
ENGL 111	Freshman Composition	3
ENGL 112	Freshman Composition	3
BUED 105	Business Math	3
ECON 153	Principles of Economics I	3
COMP 131	Introduction to Computer Information Systems	3
OFAD 302	Business Communications	3
ACTG 271	Principles of Accounting I	3
	Humanities General Requirement	9
	Social Science General Requirement	3
		33

and, as applicable

Accounting Emphasis (AAS)		*Semester Hours*
ACTG 272	Principles of Accounting II	3
BUAD 311 or 312	Business Law I or II	3
ECON 154	Principles of Economics II	3
BHSC 245	Statistics: Theory and Application	3
	Accounting Electives	9
	Natural Science General Requirement	4
	Free Electives	6
		31

Business Administration Emphasis (AAS)		*Semester Hours*
ACTG 272	Principles of Accounting II	3
BUAD 311 or 312	Business Law I or II	3
ECON 154	Principles of Economics II	3
OFAD 111	Typewriting I (or equivalent)	3
	Natural Science General Requirement	4
	Business Electives	9
	Free (non-Business) Electives	6
		31

Computer Information Systems Emphasis (AAS) *Semester Hours*

ACTG 272	Principles of Accounting II	3
COMP 221	Program Development I	3
COMP 222	Program Development II	3
COMP 331	Systems Analysis Methods	3
COMP 231 or 235 or 250	Second Language	3
ECON 154	Principles of Economics	3
OFAD 105	Keyboarding	1
BHSC 245	Basic Statistics: Theory and Application	3
MATH 108 or 111 or 241	Mathematics Course	3 or 4
	Computer Elective (300 level or above)	3
	Free Electives	5 or 6
		33-35

Medical Secretarial Administration Emphasis (AAS) *Semester Hours*

BIOL 151	Medical Terminology	2
BIOL 340	Anatomy & Physiology	4
BUED 331	Office Practice	4
HLTH 131	First Aid & Safety	3
HLTH 270	Personal & Community Health	3
OFAD 111, 112	Beginning & Intermediate Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
OFAD 301	Business English: Theory and Applications	3
		31

Office Administration Emphasis (AAS) *Semester Hours*

BUED 290	General Office Accounting Procedures	3
BUED 331	Office Practice	4
OFAD 111, 112	Beginning & Intermediate Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
OFAD 301	Business English	3
	Natural Science General Requirement	4
	Free Electives	5
		31

Diploma in Office Administration (One-Year Program) *Semester Hours*

ENGL 111	Freshman Composition	3
OFAD 111, 112	Typewriting	6
OFAD 121, 122	Elementary & Intermediate Shorthand	6
BUAD 151	Introduction to Business	3
OFAD 301 or OFAD 302	Business English / Business Communications	3
BUED 331	Office Practice	4
ACTG 271	Principles of Accounting I	3
	Elective	4
		32

MINORS AVAILABLE TO ALL STUDENTS

Accounting—Twenty-one semester hours in Accounting.

Business Administration—Accounting 271-272, Business Administration 311 and 352, Computer Information Systems 131, Economics 153, and three hours of Business electives.

Computer Information Systems—Twenty-one semester hours consisting of the following: Accounting 271, Computer Information Systems 221, 222, 331, two additional Computer Information Systems courses (one numbered 200 or above and one numbered 300 or above), and one additional course from Accounting 272, Business Administration 311, 312, 352, Economics 153, 154, or Office Administration 301.

Office Administration—Twenty-one semester hours including Office Administration 112, 122, 221, 301, Business Education 331, and six hours of Office Administration electives.

ACCOUNTING

Accounting 271. Principles of Accounting I. **(F)(3)**
Discussion of the concept of double-entry accounting. Introduction to the basic procedures in the accounting cycle, receivables, payables, inventories and other systems. *Prerequisite:* Business Education 152.

Accounting 272. Principles of Accounting II. **(S)(3)**
A continuation of Accounting 271, this course covers accounting procedures relative to partnerships, corporations, budgets, costing and financial report generation. *Prerequisite:* Accounting 271.

Accounting 331. Cost Accounting. **(F)(3)**
Special topics in job order and process cost for materials, labor, and overhead with variable and fixed portions. Budgeting and variances from budget are also covered. *Prerequisite:* Accounting 272.

Accounting 371. Intermediate Accounting I. **(F)(3)**
Accounting topics including the income statement, balance sheet and change in owners' equity statements. Cash, receivables, inventories, plant, investments and intangible assets are also covered. *Prerequisite:* Accounting 272.

Accounting 372. Intermediate Accounting II. **(S)(3)**
Continuation of Accounting 371 covering current liabilities, contingent liabilities, long-term liabilities, accounting for income taxes, and owners' equity. Statement of Change in Financial Position, financial statement analysis and the impact of changing prices are also covered. *Prerequisite:* Accounting 371.

Accounting 376. Tax Accounting. **(S)(3)**
Problems of federal taxes for individuals, partnerships, and corporations are reviewed in depth. *Prerequisite:* Accounting 272.

Accounting 430. Accounting Theory. **(F)(3)**
Covers current accounting literature, including publications of the American Institute of Certified Public Accountants (AICPA), the Financial Accounting Standards Board, and the Securities and Exchange Commission (SEC). *Prerequisite:* Accounting 372.

Accounting 433. Auditing. **(S)(3)**
Topics covered include discussion of the ethics and liability of the auditor, verification, analysis, interpretation of accounting records, issuance of audit reports and other reports by CPA's. *Prerequisite:* Accounting 372.

Accounting 471. Advanced Accounting. **(F)(3)**
Advanced in-depth discussion of accounting for joint ventures, consolidated statements, inter-company transactions, partnerships, and not-for-profit accounting. *Prerequisite:* Accounting 372.

BUSINESS ADMINISTRATION

Business Administration 151. Introduction to Business. **(F)(3)**
Forms of business ownership, marketing, personnel management, finance, and government regulations are discussed in an overview of organizations.

Business Administration 272. Salesmanship. **(S)(3)**
The interpretation of sales techniques and methods, prospecting customers, interviews, sales presentations, demonstrations, and closing the sale are presented.

Business Administration 311-312. Business Law. **(F,S)(3)**
An overview of laws dealing with contracts, agency, employment, bailment, transportation, real and personal property, leases, and bankruptcy.

Business Administration 321. Principles of Marketing. **(F)(3)**
Study of the movement of goods from producer to consumer and an examination of the functions of the marketing process, marketing institutions, channels of distribution, legal aspects, and policy considerations.

Business Administration 351. Principles of Finance. **(F)(3)**
The principal objective of this course is to introduce managerial finance as a functional area of business, including financial analysis, working capital practices, capital budgeting, corporate valuation, cost of capital, and capital structure. *Prerequisite:* Accounting 271.

Business Administration 352. Principles of Management. **(F)(3)**
The development of organization plans and policies, development of industrial relations, management operations with an emphasis on skills and techniques of leadership.

Business Administration 371. Insurance. **(S)(3)**
Insurance contracts and fields of insurance, including fire, marine, casualty, social, disability, life, and property. (Odd years only.)

Business Administration 372. Personnel Management. **(S)(3)**
Using a systems-process model, this course discusses the various subsystems (recruitment, selection, compensation, task specification, etc.) which fall under the responsibility of the personnel management function. The subsystems are designed to provide for the efficient and effective utilization of human resources in business concerns. *Prerequisite:* Business Administration 352.

Business Administration 404. Investments. **(S)(3)**
Intermediate discussion of stocks, bonds, and other investments. Analysis of the theories of investing, return and risk valuation of stock. Course will culminate in the management of a portfolio for differing investment alternatives. (Even years only.) *Prerequisite:* Business Administration 351.

Business Administration 451. Business Policy. **(S)(3)**
This course serves as a "capstone course" which attempts to bring together knowledge acquired in all of the functional areas of business (management, marketing, finance, accounting, etc.) in a case analysis situation. A strategic decision-making model will be presented as the basis for the alternative courses of action, and the implementation of the strategy chosen. *Prerequisites:* Senior status in the Business Administration program and the successful completion of Accounting 272, Business Administration 321, 351, 352, and 372.

BUSINESS EDUCATION

Business Education 105. Mathematics Applied to Business. **(F,S)(1)**
The application of basic mathematics to business operations including: Markups, markdowns, interest and discounts, bank reconcilliation, and graphing.

Business Education 281. Special Topics. **(on demand)(1)**

Business Education 290. General Office Accounting Procedures. **(S)(3)**
The primary objective of this course is to introduce the student to the current accounting practices and procedures required in an office, including all aspects of payroll accounting.

Business Education 331. Office Practice. **(S)(4)**
Emphasis is placed on the development of office proficiency, records management, internal and external office communications,information processing, and administrative support services. Laboratory required. *Prerequisites:* Office Administration 112 and 122 with a grade of at least "C" or the equivalent.

Business Education 353. Consumer Economics. **(S)(3).**
The principal objective of this course is to help the student become a well-informed consumer. The course is organized around three areas of consumer impact—consumers themselves, their effectiveness in the marketplace, and their preparation for the future.

Business Education 361. Methods of Teaching Secretarial Subjects. **(F)(3)**
A study of basic dimensions of methods, materials, and objectives in teaching secretarial subjects in the secondary school. Discussion includes teaching strategies such as questioning, lecturing, problem-solving, constructing lesson plans, constructing valid and reliable tests, interpreting test scores, and presenting lectures on video tapes. (Even years only.)

Business Education 362. Methods of Teaching Basic Business Subjects **(S)(3)**
A study of the methods, materials, and objectives in teaching basic business subjects in the secondary school. Discussion includes teaching strategies such as questioning, lecturing, problem-solving, constructing lesson objectives, constructing valid and reliable tests, interpreting test scores, and presenting lectures on video tape. (Even years only.)

COMPUTER INFORMATION SYSTEMS

Computer Information Systems 105. Microcomputer Packages. **(Sum)(2)**
A study and evaluation of the major packages available for microcomputers, including word processing, spreadsheet, and data base packages.

Computer Information Systems 131. Introduction to Computer Information Systems. **(F,S)(3)**
Survey of the fundamental computer concepts, hardware, and operations. In the second half of the term, students will be instroduced to the fundamentals of programming concepts and documentation standards, using the BASIC programming language of a model.

Computer Information Systems 221. Program Development I. **(F,S)(3)**
A study of the fundamental principles of algorithm development and structured computer programming used in solving business information systems problems, including an introduction to design and implementation documentation used by industry. Major topics include control structures, debugging, elementary data structures, and sequential files. A subset of COBOL is used as the programming language. *Prerequisites:* Computer Information Systems 131 and one of the following: Mathematics 108 or 111 or Accounting 272.

Computer Information Systems 222. Program Development II. **(S)(3)**
(A continuation of Program Development I). A study of systems of programs and the techniques for their design and development. Major topics include dynamic data structures, random files, simple data structure moduling and implementation, and uses of bulk storage devices. Programming projects will be accomplished by using a full COBOL instruction set for mainframe application and by using BASIC for microcomputer applications. *Prerequisite:* Computer Information Systems 221.

Computer Information Systems 231. BASIC Programming. **(F,S)(3)**
A study of the BASIC programming language including problem definition, flowcharting solution of problems that are adaptable to business and/or science, and hands-on experience on the microcomputer. *Prerequisites:* Computer Information Systems 131 and one of the following: Mathematics 108 or 111 or Accounting 272.

Computer Information Systems 235. RPG Programming. **(S)(3)**
A study of the RPG II programming language including problem definition, flowcharting, solution of problems that are adaptable to business applications. *Prerequisites:* Computer Information Systems 131 and one of the following: Mathematics 108 or 111 or Accounting 172.

Computer Information Systems 250. Scientific Programming in FORTRAN. **(F)(3)**
A study of the fundamental principals of algorithm development and structured programming used to solve problems from the areas of mathematics, the physical sciences, and engineering, including an introduction to design and implementation documentation. Major topics are debugging, control structures, and elementary data structures, Fortran is used as the programming language. *Prerequisites:* Computer Information Systems 131 and one of the following CIS 221 or Math 241.

Computer Information Systems 310. Introduction to Computer Architecture **(S)(3)**
A study of the fundamental concepts and terminology of computer architecture, including assembly languages, with emphasis on the relationships among hardware, architecture, systems software, and applications software. (Even years only) *Prerequisite:* Computer Information Systems 221 or Computer Information Systems 250.

Computer Information Systems 315. Operating Systems. **(S)(3)**
Survey of the major components of operating systems, comparing and contrasting various systems including simple batch, time sharing, and microcomputer systems. (Odd years only) *Prerequisite:* Computer Information Systems 221 or Computer Information Systems 250.

Computer Information Systems 331. System Analysis Methods. **(F)(3)**
A study of the system development life cycle emphasizing documentation, and communication aids, interpersonal approaches and techniques used in analysis, and logical system specification. *Prerequisite:* Computer Information Systems 221.

Computer Information Systems 332. Structured Systems Analysis and Design. **(S)(3)**
(A continuation of System Analysis Methods). A study of the structured design techniques used in designing a new logical and physical system for a given business related problem including documentation and communication aids. Alternative physical systems are designed and a multidimensional cost/benefit evaluation is performed. *Prerequisite:* Computer Information Systems 222 and Computer Information Systems 331.

Computer Information Systems 421. Software Engineering. **(on demand)(3)**
A study of the management and technical tools, procedures, and concepts used in creating software systems for specific application. Student will design and implement a software system. *Prerequisite:* Computer Information Systems 222, Computer Information Systems 315, and Computer Information Systems 331.

Computer Information Systems 425. Applied Software Development Project. **(S)(3)**
A study of application system development and project management. Students will design and implement a comprehensive system to solve a complex case study. *Prerequisite:* Computer Information Systems 441.

Computer Information Systems 441. Data Base Program Development. **(F)(3)**
A study of a software design in a data base environment, or data base systems, and of data base programming. *Prerequisite:* Computer Information Systems 332.

ECONOMICS

Economics 153. Principles of Economics I. **(F)(3)**
The primary objective of this course is to introduce the student to macroeconomic theory including a study of the economizing problem, pure and mixed capitalism, demand and supply, the economic functions of government, national income accounting, the business cycle, employment theory, money and banking, and fiscal policy.

Economics 154. Principles of Economics II. **(S)(3)**
The primary objective of this course is to introduce the student to microeconomic theory, including demand and supply analysis, elasticity, the production function, price and output determination, costs of production, pricing and employment of resources, and market structures.

Economics 251. Environmental Economics. **(S)(3)**
Societal choice in the use of scarce resources is related to ecosystem survival, environmental quality, and human welfare.

Economics 363. Money and Banking. **(F)(3)**
The primary objective of this course is to introduce the student to the historical development of the commercial banking system, including an in-depth study of the Federal Reserve System. *Prerequisite:* Economics 153.

Additional Courses listed under: Behavioral Sciences 245, Business Administration 351, Business Education 353, and History 241.

OFFICE ADMINISTRATION

Office Administration 105. Keyboarding. **(F,S)(1)**
Designed to acquaint students with keyboarding skills necessary to operate a computer efficiently.

Office Administration 111. Elementary Typewriting. **(F)(3)**
A first course in typewriting for the secretarial student. Also for those needing one course in typing for personal use. Keyboard and fundamental processes are presented. Students presenting one or more units of high school typewriting may not take this course.

Office Administration 112. Intermediate Typewriting. **(F,S)(3)**
Emphasis is placed upon techniques, speed, and accuracy. Electronic typewriters and problem typing are introduced. *Prerequisite:* Office Administration 111, one unit of high school typing or the equivalent.

Office Administration 121. Elementary Shorthand. **(F)(3)**
Principles of Gregg Shorthand, Series 90. Places emphasis on theory and developing reading and writing skills. Letter transcription introduced. Students presenting one or more units of high school shorthand may not take this class. Laboratory required.

Office Administration 122. Intermediate Shorthand. **(S)(3)**
Greater emphasis placed on writing and transcribing with speed and accuracy. Gregg theory and basic typewriting concepts reviewed. *Prerequisites:* Office Administration 111 and 121 with a grade of at least a "C" or the equivalent.

Office Administration 211. Advanced Typewriting. **(S)(3)**
This is the final course in typing. Simulations in the sales office, general office, accounting office, executive office, legal office, medical office, technical office, and government office are completed on electronic typewriters. Speed and accurancy are emphasized. *Prerequisite:* Office Administration 112 with a grade of at least "C" or the equivalent.

Office Administration 221. Dictation and Transcription. **(on demand)(3)**
Emphasis placed on speed in taking dictation and in transcription skills. *Prerequisites:* Office Administration 112 and 122 with a grade of at least "C" or the equivalent.

Office Administration 301. Business English: Theory and Applications. **(F)(3)**
Comprehensive review of grammar and usage. Emphasizes and reinforces business applications and vocabulary in areas such as business law, word processing, merchandising, management, and computer information systems. *Prerequisite:* English 111 with a grade of at least "C".

Office Administration 302. Business Communications. **(S)(3)**
Realistic methods for mastering writing skills needed in business situations. Emphasizes instruction in both the basic and advanced techniques of preparing and organizing business letters, memoranda, and reports. Also enhances speaking, reading, and listening skills. *Prerequisite:* English 111 or Office Administration 301.

Office Administration 361. Office Management. **(F)(3)**
The principal objective of this course is to introduce the student to the theories and practices required for effective office administration, including communication skills, staffing and supervisory procedures, space management, and word processing.

II. DEPARTMENT OF EDUCATION

James Kerley, *Department Head*
Elementary Education—Secondary Education

The undergraduate programs in the Department of Education have as their primary objective the prepartion of superior teachers for public and private schools, both elementary and secondary.

At Union College the education of prospective teachers is the responsibility of the College as a whole, not the Department of Education alone.

The teacher education programs described in the following pages prepare the student to receive a baccalaureate degree and, upon recommendation of the College, a Kentucky teachers certificate. A student who wishes to teach in a state other than Kentucky should determine certification requirements in that state (usually quite similar to Kentucky's), and plan his program accordingly. Information on certificaton requirements in other states is available in the education department office and in the Career Planning and Placement office.

Students preparing for teacher certification must be admitted to the Teacher Education Program of the College before they will be allowed to register for any of the professional education courses beyond Education 241 or Education 242. These students may not take professional preparation education courses on a Credit/Fail or Independent Study basis.

Graduates may continue their professional preparation by entering the Graduate Studies Program. A separate catalog is available from the Dean of Graduate Academic Affairs.

Objectives of the Teacher Education Program

The Teacher Education Program at Union College seeks to aid each student in the realization of the following objectives:

1. A knowledge of the social, physical, and psychological factors which determine behavior and which promote intellectual growth, emotional balance, and wholesome personality.
2. The development of health habits, physical skills, and recreational interests essential to personal well-being and to highest teaching effectiveness.
3. An understanding of the principles and purposes of education in a democratic society.
4. The cultivation of attitudes and abilities essential to successful relationship with youth and professional associates.
5. An understanding of the principles and techniques of effective teaching, and the development of appropriate teaching skills.
6. An appreciation of the worth of teaching as a career and as an opportunity for service to youth and to society.

Requirements for Admission to Teacher Education Program

I. Students who wish to enter teacher education must prepare a folder for presentation to the Teacher Education Committee for approval. The folder must be complete before the student is admitted to the program and must contain the following:

   1. Application to the program and an acceptably written essay (2-3 pages) on "Why I want to be a teacher".
   2. Four good recommendations from instructors.
   3. Documentation to show that all competency tests have been passed. (Students will be permitted to take the first competency test upon enrollment in Introduction to Education and Early Involvement. Students who present evidence of successful completion of competency tests taken at other institutions and have transferred to Union will have these tests accepted by Union College.)
   4. Documentation to show that the student has passed a Teacher Education Interview. (Students who enter under the old program [see III, 1 below] must still pass a Teacher Education interview.)
   5. Documentation to show that the student has a cumulative grade point average of at least 2.25.
   6. Documentation to show that the student has completed a minimum of 30 hours.
   7. Documentation to show that the student has completed English 111 and 112 with a grade of "C" or better in both courses.
   8. Documentation to show that the student has either completed or is enrolled in and taking Introduction to Education and/or Early Involvement when the folder is presented.

II. Students who have failed to pass one competency test or who lack one recommendation or those who are currently enrolled in but have not yet completed Introduction to Education, Early Involvement, and English 112 may be admitted conditionally to the program if all other requirements have been met.

III. 1. Undergraduates entering under the old program must have filed a formal application for teacher education prior to September, 1982. However, the teacher education interview will be required.

2. Students who fail a competency test will receive mandatory tutoring before re-taking any competency test.

Requirements for Admission to Student Teaching

1. Formal written application by mid-term of the semester preceding the planned student teaching. Application forms may be obtained in the Department of Education office.
2. Senior standing is a a prerequisite for admission to student teaching.
3. Completion of at least 90 semester hours of credit with at least a 2.5 grade point average in all courses attempted and 2.5 in all work attempted in the area, major, or minor fields for which certification is sought.
4. Completion of three-fourths of all required professional education courses with an academic standing of at least 2.5.
5. Completion of three-fourths of all coursework for the teaching major or area of concentration if student teaching is to be done in this specialization; or completion of all the coursework for the teaching minor if student teaching is to be done in the minor area.
6. Approval of the department in which teaching fields are sought.
7. Moral, social, and ethical behavior acceptable in the school community as well as in the community at large.
8. A valid and current medical examination which includes a tuberculosis test filed with the Teacher Education Committee.
9. Maintenance of good standing since admission to the Teacher Education Program.
10. Completion of institutional prerequisites with respect to time in residence and pre-student teaching laboratory experiences.
11. Acceptance by the Teacher Education Committee of the College.
12. No professional education course with a grade below "C"' will be accepted.

ELEMENTARY EDUCATION CURRICULUM

I. Pre-professional Course Requirements for all elementary Education majors.
(No courses can be taken on a credit/fail basis except for Psychology 111 and the Social Science course. No General Requirements courses can be taken on an Independent Study basis.)

A. Social Science (History 233 or Sociology 241 or Geography 241) ..... 3 semester hours
B. Introduction to Psychology (Psychology 111) ..... 3 semester hours
C. Children's Literature (English 355) ..... 3 semester hours
D. Structure of the Number Systems (Math 203 and 204) ..... 6 semester hours
E. Elementary School Art (Art 271) ..... 3 semester hours
F. Elementary School Music (Music 373) ..... 3 semester hours
G. Physical Education in the Elementary School (Physical Education 261 ..... 3 semester hours
H. Science: Concepts, Processes and Inquiry (General Science 40-1) ..... 3 semester hours
I. Fundamentals of Speech (Speech 131) ..... 3 semester hours

II. Professional Preparation for Elementary Teachers

A. Education 241—Introduction to Education ..... 3 semester hours
(To be taken with Education 242)
B. Education 242—Early Involvement ..... 3 semester hours
(To be taken with Education 241)
C. Education 351—Human Growth and Development ..... 3 semester hours
(*Prerequisite:* Psychology 111)

D. Psychology 361—Phychology of Learning ..... 3 semester hours
(*Prerequisite:* Psychology 111)

E. Special Education 365—Foundations of Education of the Exceptional Child ..... 3 semester hours
(*Prerequisite:* Psychology 111)

F. Education 341—Methods of Teaching Mathematics ..... 3 semester hours
(*Prerequisites:* Mathematics 203 and 204)

G. Education 361—Reading in the Primary Grades ..... 3 semester hours

H. Education 362—Teaching Reading in the Content Areas ..... 3 semester hours
(*Prerequisite:* Education 361)

I. Education 432—Methods and Materials in the Elementary School ..... 4 semester hours
(*Prerequisites:* All 200- and 300-level courses listed under General Requirements and Professional Preparation)

J. Education 441—Methods of Teaching Social Studies ..... 3 semester hours

K. Education 433—Supervised Student Teaching in the Elementary School ..... 12 semester hours

L. Education 488—Professional Interaction in the Schools ..... 3 semester hours

See Requirements for Admission to Student Teaching

For those students entering as freshmen during or after the fall semester 1985, a choice of three teaching certificates or a combination thereof is possible, i.e., Lower Elementary (grades K-4), Middle School (grades 5-8) and/or Secondary (grades 9-12). See the Head of the Education Department for more information.

SECONDARY EDUCATION CURRICULUM

I. Pre-professional Course Requirements for Students Preparing for Teaching in Secondary School.

A. Personal and Community Health (Health 270) ..... 3 semester hours

B. Introduction to Psychology (Psychology 111) ..... 3 semester hours

C. Majors, Minors, and Areas of Concentration*
An Area of Concentration ..... 48 semester hours
One Major ..... 30 semester hours
One Major of 30 semester hours and one Minor of 21 semester hours ..... 51 semester hours

D. Social Science (History 233, Sociology 241 or Geography 241) ..... 3 semester hours

E. Fundamentals of Speech (Speech 131) ..... 3 semester hours

---

*Choose any one of the 3 options listed.

Majors in subject combinations shall require 36 semester hours credit. In a combination of subjects for majors, no fewer than 12 semester hours shall be in each subject within the major. Method courses shall be in addition to those in the majors and minors. Education 362 is required of students preparing to teach English. A teaching minor in English shall require an additional 3 semester hours of credit beyond the usual 21 and must include a course in linguistics.

II. Professional Preparation for Secondary Teachers. These courses are to be taken in a six semester sequence in the following order:

A. Education 241—Introduction to Education ..... 3 semester hours
(To be taken with Education 242)

B. Education 242—Early Involvement ..... 3 semester hours
(To be taken with Education 241)

C. Education 351—Human Growth and Development ..... 3 semester hours

D. Psychology 361—Psychology of Learning ..... 3 semester hours
(*Prerequisite:* Psychology 111)

E. Special Education 365—Foundations of Education for the Exceptional Child ... 3 semester hours
(*Prerequisites:* Education 241 and 242)

F. Education 452—Methods and Materials for Secondary Education .....4 semester hours
(*Prerequisite:* Education 365)

G. Education 453—Supervised Student Teaching in the Schools .....12 semester hours
(*Prerequisites:* Education 452)

H. Education 488—Professional Interaction in the Schools .....3 semester hours

See Requirements for Admission to Student Teaching

MIDDLE GRADES CERTIFICATION

I. Professional Education Courses *Semester Hours*

Education 241—Introduction to Education 3
Education 242—Early Involvement 3
Psychology 361—Psychology of Learning 3
Education 361—Reading for Primary Grades 3
Education 362—Reading In Content Areas 3
Special Education 365—Exceptional Child 3
Education 488—Professional Interaction In The Schools 3
Supervised Student Teaching In The Middle Grades 12

II. Specialization Component

Education 352—Human Growth and Development
In The Middle Grades 3
Education 370—Curriculum Development For
The Middle Grades 3
Education 436—Materials and Methods For
The Middle Grades 4

III. Teaching Fields

(**Each student** will complete a minimum of 24 semester hours in two fields of study.)

A. English and Communication
B. Mathematics Option I or
Mathematics Option II
C. Science
D. Social Studies

48

For information on an AREA in SOCIAL STUDIES, see the Head of the Education Department or the Chair of Social Sciences.

ASSOCIATE OF APPLIED SCIENCE IN VOCATIONAL EDUCATION
(for vocational teachers)

Credit Hours

English 111 and 112—Freshman Composition 6
Psychology 111—General Psychology 3
Speech 131—Fundamentals of Speech 3
Natural Science Core Requirement 4
Humanities Core Requirement 3
Social Science Core Requirement 3
Experience Credit for Vocational Certification 6-9
Vocational Education Block (from state approved school)
(transfer) 24
Free electives 9-12

64

ASSOCIATE OF APPLIED SCIENCE IN EDUCATION*

	Credit Hours
English 111 and 112—Freshman Compositon	6
Natural Science (Environmental Science 100 recommended)	4
Sociology 131—Introduction to Sociology	
or	3
Sociology 421—Rural & Urban Sociology	
Psychology 111—Introduction to Psychology	3
Humanities Requirement (speech or theatre recommended)	3
Art 271—Elementary School Art	3
Music 373—Elementary School Music	3
Education 241—Introduction to Education	3
Education 351—Human Growth and Development	3
Education 440—Early Childhood Education	3
English 355—Children's and Adolesent Literature	3
Health 270—Personal and Community Health	3
Sociology 371—Social Institutions	3
Health 361—Principles of Nutrition	3
Special Education 365—Foundations of Ed. for Exceptional Child	3
Supervised Experience in Early Childhood Education	3
Electives—Recommended from Appalachian Semester, Kentucky History, Typing, Recreational Leadership Arts & Crafts, & Structure of Number Systems)	12
	64

ASSOCIATE OF APPLIED SCIENCE FOR GRADUATES OF STATE VOCATIONAL SCHOOLS

	Credit Hours
Credit for 22-month post-high-school vocational program	48
English 111—Freshman Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Free elective	3
	64

	Credit Hours
Credit for 11-month post-high-school vocational program	24
English 111—Freshman Composition	3
Social Science Core Requirement	3
Natural Science Core Requirement	4
Humanities Core Requirement	3
Elective Credits (planned curriculum developed & followed)	27
	64

A "C" (2.00) average is required and a minimum of 15 hours in residence.

For the vocational student wishing to continue his or her education to the Bachelor's degree level, a planned course of study (contract) will be developed so that the degree can be earned with an additional 64 hours of specified credit beyond the A.A.S. degree.

Graduates of the 11-month vocational programs should plan additional hours of general education credits within their electives to better prepare for the 4-year degree.

*Designed for those who work in day care centers and agencies dealing with small children where teacher certification is not required.

Education 241. Introduction to Education. **(F,S)(3)**
The purpose and function of education. Classroom and school organization, guidance services, library services, evaluation, reporting to parents and other phases of the school program.

Education 242. Early Involvement Internship. **(F,S)(3)**
A practical course in which students are assigned to local school classrooms 3 hours per week, and meet periodically to discuss and generalize their experiences. Acquiring competence in the following: observation, diagnosis, instructional design and planning, use of media and new technology. To be taken concurrently with Education 241. A $5.00 fee is charged.

Prerequisite for the following courses is admission to the Teacher Education Program.

Education 341. Methods of Teaching Mathematics in Elementary School. **(F)(3)**
Modern methods and materials for teaching mathematics in the elementary school. *Prerequisite:* Mathematics 203-204 or equivalent.

Education 351. Human Growth and Development. **(F,S)(3)**
Basic concepts for understanding the development of the child and the adolescent. Includes field experience. *Prerequisite:* Psychology 111 (10 hours field experience).

Education 352. Human Growth and Development in the Middle Grades. **(On demand)(3)**
This course focuses on the physical, intellectual, personal, social and moral development of children in fourth through the eighth grades, ages 10-13. Socializing influences such as families, peers, school and mass media will also be included.

Education 361. Reading in the Primary Grades. **(F)(3)**
Methods and materials for the teaching of reading in the primary grades including observations, micro-teaching demonstrations, making of lesson plans, and evaluation of a child's readiness.

Education 362. Teaching Reading in the Content Subjects. **(S)(3)**
Emphasis on study skills, individualized programs and reading in the content subjects. *Prerequisite:* (except for English majors) Education 361.

Special Education 365. Foundations of Education of the Exceptional Child. **(F,S)(3)**
Etiology and assessment of exceptional learning conditions; characteristics of exceptionalities; special education intervention. *Prerequisite:* Psychology 111 (10 hours field experience).

Education 370. The Middle School Curriculum. **(On Demand)(3)**
This course involves tracing the history of curriculum development in the United States, as well as identifying trends in the curriculum of the middle school. It will include curriculum design, middle school terminology and techniques, social and cultural forces, political forces, programs, organization and evaluation.

Education 401. Introduction to Counseling and Guidance. **(S)(3)**
Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges, and related service-oriented agencies. Essential counseling and guidance services, policies, practice and procedures. *Prerequisite:* Psychology 111.

Education 432. Methods and Materials in the Elementary School. **(F)(4)**
Emphasis on language arts, social studies, and science; directed observation. *Prerequisites:* Education 241, 341, 351, 361, and 362; Psychology 361; 90 semester hours college credit; quality point standing of 2.25 overall and at Union College; one semester residence. No late registration.

Education 433. Supervised Student Teaching in the Elementary School. **(S)(12)**
Laboratory experiences in working with children, teachers, and others in school and community. Supervision by an experienced classroom teacher for a minimum of 12 weeks. Transportation and meals paid by the students. Application to be made one semester in advance. *Prerequisites:* See Requirements for Admission to Student Teaching. A supervisory fee of $100 is charged.

Education 435. Laboratory Experiences in Education. **(on demand)(6)**
A substitute for student teaching for elementary education majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. *Prerequisites:* One year of successful classroom teaching experience; Education 241 and 242; scholastic standing of 2.25 or above; completion of 90 semester hours; approval by the Committee on Teacher Education; and one semester residence at Union College.

Education 436. Methods and Materials in the Middle School. **(On demand)(3)**
This course focuses on instructional strategies and materials needed for releasing the potential for the middle grade student leading from concrete to abstract learning. The course will include curriculum concepts and designs, innovative activities using hands-on-experiences, techniques of writing lesson plans, the development of a unit of work, materials for journal writing, class demonstrations and evaluation.

Education 440. Early Childhood Education. **(Sum)(3)**
Survey of the physical, emotional, mental, and psychological development of the child under six and the role of the kindergarten teachers in working with such a child.

Education 441. Methods of Teaching Social Studies. **(F)(3)**
Methods and materials for the teaching of elementary school social studies, including kindergarten through eighth grade curricula. The philosophies, terminology, and evaluation of methods and materials will be included.

Education 452. Methods and Materials in the Secondary School. **(F)(4)**
Current teaching methods, materials, and innovations in the secondary school with directed observations. *Prerequisites:* All 200- and 300-level courses listed under Pre-professional Course Requirements and Professional Preparation. (25 hours field experience.)

Education 453. Supervised Student Teaching in the Secondary School. **(F,S)(12)**
Under the direction of an experienced teacher, the student teacher directs the usual teaching activities in the classroom for a minimum of 12 weeks. Application should be made one full semester in advance of the time the teaching is to be done. *Prerequisite:* See Requirements for Admission to Student Teaching. A supervisory fee of $100 is charged.

Education 468. Educational Media. **(Sum)(3)**
Practice in operating educational media and construction of classroom materials. Emphasis on educational television use in the classroom.

Education 488. Professional Interaction in the Schools. **(F) (3)**
Discusses the role of the professional teacher including professional values, school community relations, school finance and programs of the school, legal aspects and human interaction in the schools from a variety of perspectives and theories. Addresses the role of classroom management in the learning process.

Education 495. Independent Study. **(F,S,Sum)(3)**
Open only to advanced students in the field of Education who wish to do intensive reading in a specific interest area. *Prerequisites:* Twelve semester hours of Education and permission of the Head of the Department.

III. DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Paul S. Moore, *Department Head*
Health—Physical Education

HEALTH

Students preparing to teach in an elementary or secondary school in Kentucky are required to complete the following courses: for an elementary certificate, Physical Education in the Elementary School; for a secondary certificate, Personal and Community Health.

Requirements for a Major in Health Education: For students choosing to pursue a teaching certificate, thirty semester hours from the courses listed under the Health department including 270, 311, and 340. In addition to the courses listed under the Health department, the following courses may be taken as electives to be included in the thirty semester hours: Sociology 271 and Sociology 311.

Requirements for a Minor in Health Education: Twenty-one semester hours which must include Health 270, 311, and 340. Courses must be chosen from those listed under Health Education major.

Health 131. First Aid and Safety Education. **(S)(3)**
Designed to aid the student in developing an understanding of the basic principles of accident prevention as applicable to the home, the highway, and the school. First aid measures for various injuries and illnesses are discussed and practiced.

Health 270. Personal and Community Health. **(F)(3)**
The relationship of bodily functions to personal health and grooming, and to community and national health.

Health 311. Health Education — K-12. **(S)(3)**
The experiences, activities, and instruction of elementary and secondary students that lead to intelligent self-direction of health behavior.

Health 340. Physiology and Anatomy. **(F)(3)**
A study of cellular construction, tissues, organs, and systems of the human body. A study of the functions of these organs and systems as it deals with health and physical education disciplines.

Health 361. Principles of Nutrition. **(F)(3)**
A study of the composition, nutritive value, and utilization of food.

Health 421. Community Health. **(F)(3)**
The social and cultural factors, the physical environment, and the health agencies and services as they relate to the health of the community.

Health 451. School and Community Health Workshop. **(Sum)(3)**
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

Health 461. Nutrition for Special Needs. **(S)(3)**
A course focusing on the nutritional needs through the life cycle, energy metabolism, and therapeutic applications of nutrition.

Health 475. Critical Areas in Health. **(F,Sum)(3)**
Specific health problems confronting society today with particular reference to secondary age students.

Health 485. Field Experiences in Health. **(F,Sum)(3-6)**
A directed field experience in some phase of health, with consideration given to both the needs and interests of the student. Opportunities will be available for practical experiences in the school situation, official health agencies, and voluntary agencies.

Health 495. Independent Study. **(F,Sum)(1-3)**
Independent study for advanced students only.

PHYSICAL EDUCATION

Requirements for a Major in Physical Education: Students choosing to pursue a Secondary teaching certificate must take thirty semester hours which must include 351, 361, 420, 421, 461, Health 340 and Health 131 and four service courses. Only two coaching courses may be counted toward the 30 hour major.

Service Courses

A maximum of eight semester hours of service courses may be credited toward graduation. Physical education majors must take four service courses. This is the maximum that can be applied to a major, but others may be taken as electives. The following service courses also meet the elementary and secondary requirement for physical education.

Physical Education 111. Beginning Swimming (Non-swimmers only) **(F,S,Sum)(1)**

Physical Education 112. Intermediate Swimming. **(F,S,Sum)(1)**

Physical Education 113. Senior Lifesaving **(F)(1)**
Prerequisite: Intermediate swimming or permission of the instructor.

Physical Education 121. Team Sports. **(F)(1)**

Physical Education 122. Volleyball. **(F,S)(1)**

Physical Education 132. Golf. **(F,S,Sum)(1)**

Physical Education 133. Tennis and Badminton. **(F,S,Sum)(1)**

Physical Education 134. Personal Fitness and Aerobic Activities. **(F)(S)(1)**

Physical Education 135. Tumbling and Trampolining. (Even years.) **(S)(1)**

Professional Courses

Physical Education 241. History of Physical Education. **(S)(3)**
From primitive man through the present, with particular emphasis on Greek physical education, European systems, and development of physical education in America. Some research into the history of various sports. (Even years only.)

Physical Education 251. Prevention and Care of Athletic Injuries. (F)(3)
Practical study and evaluation of various methods of conditioning. Emphasis on preventive and protective measures, practical study involving basic principles of massage, bandaging, strapping and first aid. Analysis of the function and operation of the training room.

Physical Education 261. Physical Education in the Elementary School. (F)(3)
The role of the classroom teacher in physical education. How to correlate and evaluate. The application of games, movements, exploration, rhythms, self-testing activities, and screening tests.

Physical Education 271. Sports Officiating. (F)(2)
Rules and officiating techniques in football, basketball, baseball, and track. (Odd years only.)

Physical Education 302. Coaching Basketball. (F)(2)
(Even years only.)

Physical Education 304. Coaching Baseball. (S)(2)
(Odd years only.)

Physical Education 305. Coaching Track and Field. (S)(2)
(Odd years only.)

Physical Education 306. Coaching Women's Team Sports. (F)(2)
(Even years only.)

Physical Education 307. Coaching Soccer. (F)(2)
(Even years only.)

Physical Education 321. Recreational Leadership. (S)(3)
Leadership techniques in music, social games, arts and crafts, dramatics, camping, nature, and sports. Designed to aid students in enriching their own leisure time and to prepare for leadership in teaching, full-time Christian service, and social service.

Physical Education 351. Tests and Measurements in Health and Physical Education. (S)(3)
Evaluating Health and Physical Education by the construction and administering of tests. Emphasizes reliability, objectivity, and validity of tests, and grading system.

Physical Education 361. Organization and Administration of Physical Education and Athletics. (S)(3)
Administration of physical education and athletic programs in schools, with special emphasis on philosophy and leadership styles. Includes budget and finance, office management, curriculum development, facilities, legal factors, and public relations.

Physical Education 420. Physical Education for the Exceptional Child. (F)(3)
Health conditions which require the physical education program to be adapted to meet the needs of individuals with handicapping conditions will be studied. Additional emphasis on national, state, and local agencies designed to help meet the needs of these individuals. Some work with a local, exceptional population may be required.

Physical Education 421. Kinesiology. (S)(3)
An analysis of human motion and its relation to athletic and gymnastic activities; practical application of these principles.

Physical Education 461. Physical Education in the Secondary School. (F)(3)
Topical areas such as philosophy, teacher certification, competencies, and professional activities will be covered. Curriculum construction, instructional methods, class management and techniques for teaching specific activities will be considered as they relate to the secondary level.

Physical Education 495. Independent Study. (F,S,Sum)(3)
Independent work for advanced students only.

MILITARY SCIENCE PROGRAM
(Army ROTC)

ROTC at Union College is affiliated with Eastern Kentucky University's program. Instructors from Cumberland College or EKU serve in an instructional capacity on Union's campus. Army ROTC has a dual mission: (1) the enhancement of citizenship through the development of leadership potential and an appreciation of the roles and missions of our national defense structure: (2) the preparation of students who are qualified by education, experience, attitude, and inherent qualities for service in the U.S. Army Reserves, National Guard, or regular active service.

Completion of the Introduction to Military Science (100-200 level) meets the first of these missions by providing the student a foundation for the development of leadership and managerial skills through life

experience and also by serving as a prerequisite for entry into the advanced military science program. The student incurs no military obligation for participation in the Introduction to Military Science. Students whose future employment goals may require leadership or managerial skills, those with an interest in our national defense structure, or those who wish to explore the benefits of a career in the U.S. Army Reserves, National Guard, or regular service are encouraged to take the introductory courses.

For additional information, including questions on ROTC scholarships and other assistance, see military science officers on campus or the division chair of Applied Sciences.

MILITARY SCIENCE

Military Science 101. Group Dynamics of Leadership. **(F)(2)**
Development of leadership and problem solving abilities; examination of leadership style and counseling techniques; comparison of civilian and military leadership; and analysis of the Constitutional and historical basis for the U.S. Army.

Military Science 102. Dynamics of Leadership and Operational Teamwork. **(S)(2)**
A study of theories, principles, techniques and fundamentals of map reading and their application. Classes are systematically arranged to promote student participation in group leadership development and problem solving techniques.

Military Science 202. American Military History. **(F)(3)**
Examines U.S. Military history from pre-revolutionary times to post-Vietnam; defines the principles of war; discusses political-military interactions; develops leadership through group contribution in case studies which apply the principles of war to historical periods.

Military Science 203. Intermediate Leadership and Management. **(S)(2)**
Provides students continued development of basic military skills through practical leadership experiences in performing emergency medical treatment, drill and ceremonies, physical training and rifle marksmanship. Principles of leadership and management are presented in classroom discussion.

Military Science 287. Military Science Practicum (Basic). **(On Demand)(2,4,6)**
Introduces Military Science in a comprehensive summer field course designed to be taken in lieu of MLSC 101, 102, 202, or 203. This course emphasizes practical field application and leadership development.

Military Science 301. Advanced Leadership and Management I. **(F)(3)**
Introduction to advanced leadership and management, emphasizing the branches of the Army, communication systems, and equipment. Defines principles of leadership and develops leadership through practical application as a leader in field training and physical conditioning.

Military Science 302. Advanced Leadership and Management II. **(S)(3)**
Develops leadership and management ability and military skills in military communications, weapons, and tactics. Develops leadership and command presence through student presentations and practical application as a leader in field training and physical conditioning.

Military Science 401. Fundamentals and Dynamics of the Military Team I **(F)(3)**
Develop staff officer skills in leadership and management through decision making and problem solving techniques through military planning, administrative and logistical management and detailed training management.

Military Science 402. Fundamentals and Dynamics of the Military Team II. **(S)(2)**
Discusses the impact of world affairs on U.S. Armed Forces; defines overall professional and ethical responsibilities of military officers; development of military officers; development of military management techniques; establishes a basic understanding of military justice and the Geneva convention.

Military Science 487. Military Science Practicum (Advanced). **(On Demand)(6)**
Develops leadership through intensive six-week field course of rotating leader/command experience in problem analysis, decision making, and troop leading, while providing in-depth coverage of technical and tactical subjects.

Division of Humanities

Dianne R. Ferris,*Chairman*
Department of English and Foreign Languages
Department of Music and Fine Arts
Department of Religion and Philosophy

HUMANITIES

Humanities 101, 102, 103, 104. Chapel. **(F,S)(1)**
Participation in chapel programs is designed to aid the student in achieving the breadth and flexibility of mind necessary for full participation in a complex culture. Four major themes are addressed: (a) God and the relations between God, the universe, and man; (b) significant ethical questions and moral issues; (c) the ceremony and liturgy of the Church; (d) significant art and music in the Christian tradition. May be repeated for a maximum of four credits in a four-year course of study.

Humanities 202. Introduction to Film. **(S)(3)**
Film is studied as an art form concerned with the human values of mankind. Appreciation of film and its basic elements and techniques is stressed. (Odd years only.)

Humanities 204. History of the Motion Picture. **(S)(3)**
A study of film's development as an distinctive medium of communication and as a art form. The course offers explorations of landmark films from the silent period to contemporary times. (Even years only.)

I. DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES

Jan M. Finkel, *Department Head*
English—French—German—Spanish
Journalism (Area of English)

BACHELOR OF ARTS DEGREE IN ENGLISH

Requirements for a Minor in English

		Semester Hours
ENGL 221	Survey of English Literature I	3
ENGL 222	Survey of English Literature II	3
ENGL 241 or 242	Major American Writers	3
ENGL 311	Intermediate Compostion	3
ENGL 372	Shakespeare	3
ENGL 351 or	The Novel: Defoe to Brontes	
ENGL 352 or	The Novel: ca. 1850 to Faulkner	
ENGL 361	Modern Poetry	3
ENGL 401 or	Modern Grammar	
ENGL 421	History of the English Language	3
		21

Requirements for a Major in English
In addition to all courses required for the minor, students take one of the following courses:

ENGL 321	English Renaissance Literature	
ENGL 322	Restoration and 18th Century Literature	
ENGL 331	English Romantic Period	
ENGL 332	Victorian Period	3
and		
ENGL 472	Seminar in Literature	3
	English Elective	3
		30

Requirements for a Major in English with a Journalism Emphasis

Students take twenty-four hours of English courses (listed below) and twenty-three hours of Journalism courses, Option A, B or C (also listed below).

ENGL 221	Survey of English Literature I	3
ENGL 222	Survey of English Literature II	3
ENGL 241	Major American Writers I	3
ENGL 242	Major American Writers II	3
ENGL 311	Intermediate Compostion	3
ENGL 401 or	Modern Grammar	
ENGL 421	History of the English Language	3
ENGL 402 or	Advanced Composition	
	300-400 level literature course	3
	Elective 300-400 level literature course	3
		24

Option A — Reporting/Editing

JOUR 225	Newswriting	3
JOUR 226	Feature, Editorial, Sportswriting	3
JOUR 227	Editing, Layout	3
JOUR 340	Advanced Newswriting	3
JOUR 485	Internship-Reporting	4
	Journalism Practicums — "Union Express"	4
		23

Option B — Technical/Production

JOUR 227	Editing, Layout	3
JOUR 233	Photojournalism	3
JOUR 343	Advanced Photojournalism	3
JOUR 345	Print Production, Design, Typography I	3
JOUR 346	Print Production, Design, Typography II	3
JOUR 485	Internship - Layout/Design	4
	Journalism Practicums — *Stespean*	4
		23

Option C — Combination

A combination of courses from Options A and B, including practicums.

In all three options, practicums may be fulfilled by working either on "The Union Express" (JOUR 180 to 480) or on *The Stespean* (JOUR 190 to 490) or by choosing a combination of two practicum sets. Four additional "Union Express"practicums and four additional *Stespean* practicums are available to students during their junior and senior years.

Requirements for an Area in English

Forty-eight semester hours (thirty of which must satisfy the requirements for a English major), including an advanced writing course and courses in speech and drama.

Students preparing to teach high school English are required to take Education 362 and should elect the English major, minor, or area. They should consult the Education Department for full information about course requirements.

All students majoring or minoring in English are advised to take at least six hours of a foreign language.

ENGLISH

English 090-091. English as a Second Language. **(F,S)(0)**

A preliminary, non-credit course for the foreign student seeking to acquire sufficient competence in listening to and speaking the English language to be able to communicate effectively in the classroom and in the college community. (On demand)

English 110. Developmental English. **(F,S)(3)**

Training in college-level language skills. Designed to prepare students for English 111 and other introductory courses.

English 111. Freshman Composition I. **(F,S)(3)**

Writing papers from a variety of rhetorical approaches and stressing interdisciplinary connections. Reading of short prose pieces as models and for discussion. Must precede English 112.

English 112. Freshman Composition and Literature **(F,S)(3)**
Literary works and forms from the ancient world to the Middle Ages provide the basis for longer papers emphasizing critical writing and documentation.

A general prerequisite for 200-level courses is the successful completion of English 111 and 112 with a grade of "C" or better.

English 212. Western Literature. **(F,S)(3)**
Survey of Western Literature from early Christian era through 17th Century. *Prerequisite:* English 112.

English 221, 222. Survey of English Literature. **(F,S)(3)**
The first half includes the Middle Ages, the Renaissance, the Restoration and Eighteenth Century, and the second includes the Romantic and Victorian periods, and the Twentieth Century. Either course may be taken separately and not necessarily in sequence.

English 241, 242. Major American Writers. **(F,S)(3)**
The first half (1830-90) begins with Poe and ends with Emily Dickinson, and the second (1890-1950) begins with Twain and ends with Faulkner. Either course may be taken separately and not necessarily in sequence.

English 272. Special Topics in Literature. **(F,S)(3)**
One course in a special topic such as Appalachian Literature, Commerce in Fiction, Science Fiction, and Women in Literature will be offered each year.

English 311. Intermediate Composition. **(S)(3)**
A writing course designed to reinforce and expand writing skills. Expository and argumentative papers of substantial length and an extensive research paper. Appropriate selected readings for discussion and analysis to provide perspective for the student's own writing. *Prerequisites:* English 112 and junior or senior standing.

A general prerequisite for literature courses numbered 300 and above is the successful completion of any one of English 212, 221, 222, 241, 242, or 272. Students are urged to consult with members of the department before enrolling for advanced work.

English 321. English Renaissance Literature. **(F)(3)**
A study of poetry, prose, and non-Shakespearean drama, beginning in the early sixteenth century and ending with Milton. (Odd years only.)

English 322. Restoration and Eighteenth Century Literature. **(S)(3)**
Prose and poetry of the neo-classical age, beginning with Dryden and his contemporaries and extending through Samuel Johnson. (Odd years only.)

English 325. British Drama in the Twentieth Century. **(F)(3)**
Modern issues and modern society as shown in works of the modern British theatre and the contribution of typical writers both to the theatre and to society. (Even years only.)

English 331. English Romantic Period. **(F)(3)**
The prose and poetry of the first third of the 19th century, emphasizing the work of Wordsworth, Coleridge, Byron, Shelley, and Keats. (Even years only.)

English 332. Victorian Period. **(S)(3)**
Major poets and prose writers, emphasizing the contributions of such masters as Tennyson, Browning, and Arnold. (Even years only.)

English 351, 352. The Novel. **(F,S)(3)**
Historical study of the growth of the novel as a form. The first course includes novels from Defoe through the Brontes; the second begins ca. 1850 and goes through Faulkner. Either course may be taken separately and not necessarily in sequence. (Even years only.)

English 355. Children's and Adolescent Literature. **(F)(3)**
Books for children and adolescents can entertain, inspire, and challenge adults as well as children and adolescents. This course surveys a wide variety of fiction and poetry enjoyed by children and adolescents and suggests ways of evaluating these works as literature.

English 361. Modern Poetry. **(F)(3)**
American and British poetry, with consideration of ways of reading, criticizing, and writing verse in this century. (Odd years only.)

English 372. Shakespeare. **(S)(3)**
A critical approach to selected histories, comedies, and tragedies, focusing on their timeless human, literary and dramatic qualities.

A general prerequisite for 400-level courses is junior standing.

English 401. Modern Grammar. **(F)(3)**
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent developments in generative semantics. Considerable attention will be paid to the possibilities of practical applications of linguistic theory. (Even years only.)

English 402. Advanced Composition. **(S)(3)**
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student. (Even years only.)

English 419. Composition for Teachers. **(S)(3)**
Review of basic elements of composition with regular writing assignments in both expository and argumentative modes. Techniques of marking and evaluation of student papers. Research techniques, a methodology for teaching students to develop a research paper and practical application of the methodology through the assignment of a research paper as an integral part of the course itself.(On demand)

English 421. History of the English Language. **(F)(3)**
A study of the origins and development of the English language from Anglo-Saxon times to the present. (Odd years only.)

English 472. Seminar in Literature. **(S)(3)**
Intensive study of a major writer, group, or literary topic. May be repeated once for credit.

English 495. Independent Study. **(F,S)(3)**
Intensive individual work, under supervision, in some phase of English, American, or world literature, linguistics, or composition not otherwise covered in the curriculum. *Prerequisites:* Twenty-four hours of English above English 111, 112, and permission of the head of the department. May be repeated for credit.

JOURNALISM

Journalism 180, 280, 380, 480. Journalism Practicum. **(F,S)(1)**
Actual operation of campus newspaper provides experience in reporting, photojournalism, and use of print shop equipment. 380 and 480 include management. To be taken in sequence.

Journalism 190, 290, 390, 490. Journalism Practicum. **(F,S)(1)**
Actual operation of campus yearbook provides experience in the basics of photojournalism, design, and layout. 380 and 480 include management. To be taken in sequence.

Journalism 225. Newswriting. (Formerly English 225). **(F)(3)**
Basic course in reporting the news. Focus on information gathering, news story content and formats, working under deadlines, and use of Associated Press style. *Prerequisite:* English 112 and typing proficiency of 20 w.p.m.

Journalism 226. Feature, Editorial, Sports Writing. (Formerly English 226). **(S)(3)**
Instruction and practical experience in writing each of the above for newspapers and magazines. Exploration of free-lance market opportunities for publication of feature and sports articles. *Prerequisite:* English 112 and typing proficiency of 20 w.p.m.

Journalism 227. Editing, Layout. (Formerly English 227). **(F)(3)**
Basic instruction in copy editing, page layout and design, headline writing, photo handling, and outline writing.

Journalism 233. Photojournalism. **(S)(3)**
Reporting the news with a camera. Stresses composing and shooting with a 35mm camera and includes darkroom instruction and experience. Lab fee: $25. (Odd years only)

Journalism 340. Advanced Newswriting. **(S)(3)**
Gathering and writing news in depth on current issues and concerns. Stresses awareness of local, state, national, and world events, and techniques of investigative reporting. *Prerequisite:* Journalism 225.

Journalism 343. Advanced Photojournalism. **(S)(3)**
In-depth study of photojournalism equipment, processes, techniques, and styles. Intensive darkroom experience. Includes study of works of prominent photojournalists, developing ideas photographically, creating a photographic essay. Lab fee: $25. *Prerequisite:* Journalism 233 (Even years only).

Journalism 345. Print Design, Production, Typography I. **(S)(3)**
Creative and practical aspects of designing and preparing materials in print. Experience in use of photographic print shop equipment. Lab fee: $20. *Prerequisite:* typing proficiency of 20 w.p.m.

Journalism 346. Print Design, Production, Typography II. (S)(3)
In-depth continuation of Journalism 345. Lab fee: $20. *Prerequisite:* Journalism 345.

Journalism 450. Seminar in Journalism Topics. (S)(3)
Intensive study of journalism issues, including, but not limited to, press freedom, copyright, libel, slander, fair comment, evolution of print media and its current concerns. *Prerequisite:* 12 hrs. of journalism, Junior or Senior status and recommendation of course instructor.

Journalism 485. Internship-Reporting. (4)
Professional experience with staff of an area newspaper. May be repeated once. *Prerequisite:* 14 hrs. of journalism in Option A or C, Junior or Senior status and recommendation of journalism instructor.

Journalism 485. Internship-Layout, Design. (4)
Professional experience at an area newspaper in layout, paste-up, headline writing, photograph handling, cutlines, and advertisements. May be repeated once. *Prerequisite:* 14 hrs. of journalism in Option B or C, Junior or Senior status, and recommendation of journalism instructor.

Journalism 486, 487, 488, 489. Journalism Practicums. (F,S)(1)
Position of high level repsonibility on campus newspaper provides continued experience in editing, layout, and newspaper management. *Prerequisite:* Journalism 480.

Journalism 492, 493, 496, 497. Journalism Practicums. (F,S)(1)
Position of high level responsibility on campus yearbook provides continued experience in photojournalism, layout, and yearbook management. *Prerequisite:* Journalism 490.

FRENCH

The program offers the opportunity to gain some understanding of France and its culture as well as a basic knowledge of the French language. Students offering more than one entrance unit in French and students transferring from other colleges should consult with the instructor before registering for any course in French.

French 111. Elementary French I. (F)(3)
Basic French grammar; simple reading; practice in the oral and written language. (Even years only.)

French 112. Elementary French II. (S)(3)
Continuation of French 111. *Prerequisite:* French 111 or equivalent. (Even years only.)

French 211. Intermediate French I. (F)(3)
More detailed study of grammatical structure; study of important literary works; individual collateral reading tailored to the student's interests. *Prerequisite:* French 112 or equivalent. (Odd years only.)

French 212. Intermediate French II (S)(3)
Continuation of French 211. *Prerequisite:* French 211 or equivalent. (Odd years only.)

French 331. French Civilization. (S)(3)
The economic, social, and cultural development of France; French contributions to world civilization. May not count toward fulfillment of the language requirement. **No knowledge of French required.** (Even years only.)

French 495. Independent Study. (F,S)(3)
Intensive independent study of some aspect of French literature or civilization. May be repeated for credit.

GERMAN

The program offers the opportunity to gain some understanding of Germany and its culture as well as a basic knowledge of the German language. Students offering more than one entrance unit in German and students transferring from other colleges should consult with the instructor before registering for any course in German.

German 111. Elementary German I. (F)(3)
Basic German grammar; simple reading; practice in the oral and written language.

German 112. Elementary German II. (S)(3)
Continuation of German 111. *Prerequisite:* German 111 or equivalent.

German 211. Intermediate German I. (F)(3)
More detailed study of grammatical structure; reading of important literary works; individual collateral reading tailored to the students's interests. *Prerequisite:* German 112 or equivalent.

German 212. Intermediate German II. (S)(3)
Continuation of German 211. *Prerequisite:* German 211 or equivalent.

German 331. German Civilization. (S)(3)
The economic, social, and cultural development of Germany; German contributions to world civilization. May not count as part of the language requirement. **No knowledge of German required.** (Odd years only.)

German 495. Independent Study. **(F,S)(3)**
Intensive independent study of some aspect of German literature or civilization. May be repeated for credit.

SPANISH

The program offers the opportunity to gain some understanding of Spain and its culture as well as a basic knowledge of the Spanish language. Students offering more than one entrance unit in Spanish and students transferring from other colleges should consult with the instructor before registering for any course in Spanish.

Spanish 111. Elementary Spanish I. **(F)(3)**
Basic Spanish grammar; simple reading; practice in the oral and written language; cultural background.

Spanish 112. Elementary Spanish II. **(S)(3)**
Continuation of Spanish 111. Prerequisite: Spanish 111 or equivalent.

II. DEPARTMENT OF MUSIC AND FINE ARTS

Betty S. Stroud, *Department Head*
Art—Drama and Speech—Music

ART

Union College course offerings in the field of art provide service courses for several curricula and opportunities for exploration and growth in artistic self-expression.

Art 132. Introduction to Art. **(S)(3)**
An introduction to Art outlining basic approaches, principles, techniques and media as well as styles of expression, both past and present.

Art 271. Elementary School Art. **(F)(3)**
A studio course involving many kinds of art projects in media suitable to and practicable for elementary grades.

Art 373. Art History. **(on demand)(3)**
The intensive study of major movements, personalities, and styles of architecture, painting, and sculpture of world art.

Art 495. Independent Study in Art. **(F,S)(3)**
Independent study or research on approved topics. May be repeated for credit.

DRAMA AND SPEECH

Requirements for a Major: Union College offers a comprehensive major with two options. Students may either fulfill the requirements for teacher certification in Drama/Speech or major in Drama. Other than the Speech courses required for the first option, there is very little difference between the two.

Core courses required for the major include Drama 251, 352, 331, 332, 365, 366, and 451: a total of twenty-one semester hours.

Students electing the Drama/Speech option are also required to take twelve hours in approved courses in Speech, including Speech 131, and three hours of upper division dramatic literature courses.

Students electing the Drama option are also required to take six hours of upper division dramatic literature courses and Drama 461.

Requirements of a Minor in Drama and Speech: Twenty-one semester hours, including Drama 251, 331, or 332, 365, 366 and Speech 131, 231. Cannot be used for a teaching minor certificate.

Requirements for a Minor in Drama: Twenty-one semester hours in Drama, including Drama 251, 331, 332, 365, 366. Can be used for teacher certification.

Drama 131. Introduction to the Theatre. **(F)(3)**
A broad overview of the history of theatre and drama as well as an introductory study of acting, designing, and directing.

Drama 151, 152, 153, 154. Theatre Practicum. **(F,S)(1)**
Actual practical experience in Union College Theatre productions in either performance or technical areas.

Drama 251. Fundamentals of Acting. **(S)(3)**
An introduction to the Stanislavsky system of acting involving exercises, analysis, and performance of short scenes.

Drama 321. European Drama Since 1945. **(on demand)(3)**
A study of representative plays in translation by modern writers from Germany, France, Italy, and Poland.

Drama 331. Scene and Light Design. **(F)(3)**
Fundamentals of set and light design for the stage. Practical study of set construction and lighting equipment. Prerequisite: Drama 131 or permission of instructor. (Odd years only).

Drama 332. Costume and Make-up Design. **(S)(3)**
Fundamentals of costume design for the stage. Practical study of costume construction application of make-up. Prerequisite: Drama 131 or permission of instructor. (Odd years only).

Drama 352. Advanced Acting. **(on demand)(3)**
Analysis and performance of scenes from contemporary drama and Shakespeare. Prerequisite: Drama 251 or permission of instructor.

Drama 365. History of the Theatre. **(F)(3)**
A history of the theatre from the Greeks to WWII. Prerequisite: Drama 131 or permission of instructor. (Even years only).

Drama 366. The Development of Dramatic Art. **(S)(3)**
A study of dramatic literature and criticism from the Greeks to WWII. Prerequisite: Drama 131 or permission of instructor. (Even years only)

Drama 451. Directing. **(on demand)(3)**
Study of directing techniques, and script analysis culminating in the staging of a one-act play. Prerequisite: Permission of instructor.

Drama 461. Senior Project in Theatre/Drama. **(on demand)(3)**
A supervised project involving advanced work in some area of Theatre/Drama: criticism, history, directing, designing or performing. Open only to students majoring in Drama.

Drama 495. Independent Study in Drama. **(on demand)(3)**
Independent study or research on approved topics.

Speech 131. Fundamentals of Speech. **(F)(3)**
Study and practice of gathering and organizing material for informative and persuasive speeches.

Speech 231. Oral Interpretation of Literature. **(S)(3)**
Analysis and performance of narrative prose, poetry, and drama.

Speech 341. Debate. **(on demand)(3)**
The study and practice of formal debate. Case preparation and methods of organization using the national college debate topic for the year. Designed to help students think more clearly, organize their ideas more effectively, and present their conclusions more persuasively.

Speech 342. Persuasion. **(on demand)(3)**
This course serves to acquaint students with the theory and practice of persuasive techniques. Students will develop their own powers of persuasion and learn to recognize the rhetorical techniques employed by others.

MUSIC

Objectives:

1. To provide the required curricula for the Bachelor of Arts and the Bachelor of Science in Music, the Bachelor of Music in Church Music, the Bachelor of Music in Music Education.
2. To offer group and private instruction which provides for the development of individual musicianship of the music major and music minor.
3. To offer opportunities for participation in music ensembles and music theatre for the music majors, music minors, and general college students.
4. To provide recitals, concerts, and music theatre for the cultural enrichment of the campus and community.

Music Library. The music library, located in the Fine Arts Building, contains records, scores, and listening facilities.

DEGREES

Students majoring in music at Union College may pursue the following degree programs:

Bachelor of Music in Music Education
Bachelor of Music in Church Music
Bachelor of Arts in Music
Bachelor of Science in Music
Bachelor of Science in Music and Business

Bachelor of Music in Music Education
(K-12 Certificate)

Candidates for the Bachelor of Music in Music Education will take the following courses (see also Liberal Education and graduation requirements):

(Part of general studies for music majors; prerequisite to admittance to the major in music education.)

Option I, Instrumental Emphasis *Semester Hours*

MUSC 161-162	Foundations of Music	8

I. Music Core

MUSC 261-262	Harmony	6
MUSC 361-362	Form and Analysis	4
MUSC 321-322	Music History	6
MUSC 111-411	Applied Music	7
MUSC 152, 153, 154, 155, 156, 157, 158, 159	Ensembles	8
MUSC 263-264	Sight-Singing and Ear-Training	2
MUSC 173-174	Piano Class	2
MUSC 417	Senior Recital	1
		36

II. Professional Courses

MUSC 271	Music in the Public Schools	2
MUSC 373	Elementary School Music	3
MUSC 375	Instrumental Methods and Materials	2
MUSC 471	Marching Band Techniques	2
SPED 365	Foundations of Education for the Exceptional Child	3
EDUC 241	Introduction to Education	3
EDUC 351	Human Growth and Development	3
PSYH 361	Psychology of Learning	3
EDUC 453	Supervised Student Teaching	12
		33

III. Additional Music Requirements

MUSC 171	String Instruments Class	1
MUSC 172	Woodwind Instruments Class	1
MUSC 175	Brass Instruments Class	1
MUSC 176	Percussion Class	1
MUSC 365	Arranging	2
MUSC 474	Conducting, Instrumental	2
		8

Total 77

Option II, Vocal Emphasis

MUSC 161-162	Foundations of Music	8
I. Music Core		
MUSC 261-262	Harmony	6
MUSC 361-362	Form and Analysis	4
MUSC 321-322	Music History	6
MUSC 111-411	Applied Music	7
MUSC 152, 153, 154, 155, 156, 157, 158, 159	Ensembles	8
MUSC 263-264	Sight-Singing and Ear-Training	2
MUSC 173-174	Piano Class	
177-178	Voice Class	2
MUSC 417	Senior Recital	1
MUSC 475	Pedagogy-Vocal	2
		38
II. Professional Courses		
MUSC 271	Music in the Public Schools	2
MUSC 373	Elementary School Music	3
MUSC 374	Vocal Methods for the Secondary School	3
SPED 365	Foundations of Education for the Exceptional Child	3
EDUC 241	Introduction to Education	3
EDUC 351	Human Growth and Development	3
PSYH 361	Psychology of Learning	3
EDUC 453	Supervised Student Teaching	12
		32
III. Additional Music Requirements		
MUSC 365	Arranging	2
MUSC 473	Conducting, Choral	2
		4
	Total	74
Keyboard majors:	Private Voice	2
	Total	76

Bachelor of Music in Church Music

Candidates for the Bachelor of Music in Church Music will take the following courses (see also Liberal Education and graduation requirements).

I. Music Core		*Semester Hours*
MUSC 161-162	Foundations of Music	8
MUSC 261-262	Harmony	6
MUSC 361-362	Form and Analysis	4
MUSC 321-322	Music History	6
MUSC 111-411	Applied Music	7
MUSC 152, 153, 154, 155, 156, 157, 158, 159	Ensembles	8
MUSC 263-264	Sight-Singing and Ear Training	2
MUSC 173-174	Piano Class/	
177-178	Voice Class	2
MUSC 417	Senior Recital	1
		44

II. Church Music and Professional Courses

MUSC 333	Church Music Administration	2
MUSC 335	Hymnology	2
MUSC 337	Church Organs	2
MUSC 373	Elementary School Music	3
MUSC 374	Vocal Methods for the Secondary School	3
MUSC 436	History and Philosophy of Church Music	2
MUSC 437	Church Music Practicum	4
MUSC 231	Handbells	1
		19

III. Additional Music Requirements

MUSC 171, 172, 175	Instrumental Techniques (choose 2)	2
MUSC 473	Conducting, Choral	2
MUSC 474	Conducting, Instrumental	2
MUSC 462	Counterpoint	2
	Private Piano or Organ (for voice major)	
	or	
	Private Voice (for instrumental major)	2
		10

IV. Courses in Religion

RLGN 111	Old Testament History, Literature and Interpretation	3
RLGN 112	New Testament History, Literature and Interpretation	3
RLGN 355	World Regligions	3
		9
	Total	82

Bachelor of Arts and Bachelor of Science in Music

Candidates for the Bachelor of Arts or Bachelor of Science Degree in Music will take the following music courses (see also Liberal Education and graduation requirements):

I. Academic Emphasis

MUSC 161-162	Foundations of Music	8
MUSC 261-262	Harmony	6
MUSC 361-362	Form and Analysis	4
MUSC 321-322	Music History	6
MUSC 421-422	Music History Seminar	6
MUSC 111-212	Applied Music*	8
	Music Elective	2
	Ensemble	0
		40

II. Applied Emphasis

MUSC 161-162	Foundations of Music	8
MUSC 261-262	Harmony	6
MUSC 361-362	Form and Analysis	4
MUSC 321-322	Music History	6
MUSC 111-412	Applied Music	16
	Ensemble	0
		40

*Eight (8) hours of Applied music credit may include study in a secondary area, but the 212 level must be reached in the student's major applied area.

Bachelor of Science in Music and Business

Candidates for the Degree of Bachelor of Science in Music and Business will take the following courses (see also Liberal Education and graduation requirements):

I. Business Core

BUAD 321	Principles of Marketing	3
BUAD 351	Principles of Finance	3
BUAD 352	Principles of Management	3
BUAD 311 or 312	Business Law	3
ACTG 271-272	Accounting	6
COMP 131	Introduction to Computer Information Systems	3
ECON 153-154	Principles of Economics	6
		27

II. Music Requirements

MUSC 161-162	Foundations of Music	8
MUSC 262-262	Harmony	6
MUSC 111-412	Applied Music	8
MUSC 322	Music History	3
MUSC 171, 172 173, 175, 176	String, Woodwind, Piano, Brass and Percussion classes (choose any 3)	3
		28

III. Additional Business Requirements

BUAD 272	Salesmanship	3
OFAD 302	Business Communications	3
	Upper Division Business Elective	3
	Field Placement	3-10
		12-19

Minor in Music

Twenty-one semester hours, including: Music 161-162; three semester hours selected from either Music 321 or 322; two semester hours of music electives; two years of ensemble; and completion of the 202-level of course numbering in one field of applied music, or eight hours of applied music arranged differently with the consent of the department.

DEPARTMENTAL REQUIREMENTS

Specific requirements for music majors and minors are listed in the Music Department Handbook. Students will be held responsible for requirements in the Handbook. More detailed information is given for the following:

1. Entrance Test: All music majors and minors entering the Department for the first time shall take a placement test in theory and functional piano. The test is for placement only, and in no way affects the entrance to music study.
2. Piano Proficiency: All candidates for the Bachelor of Music in Music Education and the Bachelor of Music in Church Music must demonstrate proficiency as required for Music 202, Applied Music Secondary, Piano.
3. Ensemble Requirements: All music majors are required to participate in a minimum of seven semesters in one ensemble within their major performance area and two semesters in another ensemble (8 of the 9 hours must be taken for credit except for those enrolled in the BA or BS curricula). All music minors are required to participate in a minimum of four semesters in an ensemble within their major performance area.
4. Recital and Concert Attendance: Attendance at departmental recitals and concerts is required of all music majors and minors during each semester of applied music study.
5. Recital Requirements: Candidates for the Bachelor of Music degree must present a full recital on their major instrument or in voice. Candidates for the Bachelor of Arts or Bachelor of Science degree in Music may be invited to present a recital by the music faculty.

APPLIED MUSIC—SECONDARY LEVEL

These courses are designed for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor, a major with an academic emphasis, any music major taking lessons on a secondary instrument, and elective credit.

Music 101-102. Applied Music. **(F,S)(1-2)**
Freshman level secondary applied music study.

Music 201-202. Applied Music. **(F,S)(1-2)**
Sophomore level secondary applied music study.

Music 301-302. Applied Music. **(F,S)(1-2)**
Junior level secondary applied music study.

Music 401-402. Applied Music. **(F,S)(1-2)**
Senior level secondary applied music study.

APPLIED MUSIC—MAJOR LEVEL

These courses are designed for students enrolled in Music and Business and for students seeking a Bachelor of Arts or a Bachelor of Science degree with a music major or minor, applied emphasis, and for the Bachelor of Music in Church Music or Music Education.

Music 111-112. Applied Music. **(F,S)(1-2)**
Freshman major or minor level applied music study

Music 211-212. Applied Music. **(F,S)(1-2)**
Sophomore major or minor level applied music study.

Music 311-312. Applied Music. **(F,S)(1-2)**
Junior major level applied music study.

Music 317. Junior recital. **(F,S)(0-1)**

Music 411-412. Applied Music. **(F,S)(1-2)**
Senior major level applied music study.

Music 415-416. Applied Field Literature. **(on demand)(2)**
A study of the literature for the student's major instrument, and related instruments where appropriate, with attention to stylistic characteristics and ornamentation.

Music 417. Senior Recital. **(F,S)(0-1)**

Music 418-419. Sight-Reading and Accompanying. **(on demand)(1)**
Proficiency in reading the various clefs, vocal scores, and accompaniments, with emphasis on the techniques of sensitive accompanying. Keyboard majors and selected minors only.

HISTORY AND APPRECIATION

Music 121. Introduction to Music. **(F)(3)**
An historical approach to music appreciation focusing on period and style. Extensive listening to music literature. Not open to music majors or minors.

Music 122. Introduction to the History of America Popular Music. **(S)(3)**
An historical approach involving the study of styles and personalities beginning with the origins of jazz and ending with current trends and concepts. Open to all students.

Music 321, 322. Music History. **(F,S)(3)**
A study of representative music both written and recorded and readings coordinating and integrating music skills. (321) Antiquity through 1600. (322) Baroque period to the present. Prerequisite: Music 162.

Music 421-422. Music History Seminar. **(on demand)(3)**
Intensive study of a selected period or genre. Major paper required. Prerequisite: Music 321,322.

CHURCH MUSIC

Music 231. Handbell Methods. **(F)(1)**
A study of the techniques, methods, materials, and repertory of English handbell ringing. Prerequisite: Music 162 or consent of instructor.

Music 333. Church Music Administration. **(F)(2)**
The role of the minister of music as related to the graded adult, youth, and children's choir programs, budget and calendar planning, the congregation, the multiple staff church, and the denomination.

Music 335. Hymnology. **(S)(2)**
The study and analysis of the hymns of the church, their sources, development, and usage in contemporary service.

Music 337. Church Organs. **(F)(2)**
The study of the history of the instrument, types of organs, basic upkeep, techniques, and service repertoire.

Music 436. History and Philosophy of Church Music. **(S)(2)**
A detailed, historical study of music within the church relating to its origin and development, with emphasis upon liturgies and historic philosophical positions of the church on music.

Music 437. Church Music Practicum **(on demand)(4)**
One semester or one summer of supervised field work in an approved church. Prerequisite: Consent of the Music faculty.

ENSEMBLES

Music 152. Union College Singers. **(F,S)(0-1)**
Open by audition only; performs in chapel, Christmas concert, Spring concert, graduation, tours, and festivals. Limited to forty-nine students; four rehearsals per week. May be repeated for credit.

Music 153. Stage Band. **(F,S)(0-1)**
Open by audition only. A jazz-oriented ensemble of appropriate instrumentation limited to twenty students. Two rehearsals per week. May be repeated for credit.

Music 154. Pep Band. **(F,S)(0-1)**
Open to all interested wind and percussion students. A performance group intended to give support and entertainment at home athletic events. Two rehearsals per week. May be repeated for credit.

Music 155. Brass Chamber Ensemble. **(on demand)(0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 156. Collegium Musicum. **(on demand)(0-1)**
Open to interested students. A performance group intended to give the student acquaintance with less frequently performed literature. One rehearsal per week. May be repeated for credit.

Music 157. Woodwind Chamber Ensembles. **(on demand)(0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 158. String Chamber Ensemble. **(on demand)(0-1)**
Open by audition only. Size and make-up will vary with the needs and interests of the students enrolled. One rehearsal per week. May be repeated for credit.

Music 159. Union College Chamber Singers. **(F,S)(0-1)**
A vocal ensemble composed of 10-20 singers whose repertory consists of choreographed popular music as well as traditional types of vocal chamber music. Open to members of the Union College Singers by audition.

THEORY

Music 161-162. Foundations of Music. **(F,S)(4)**
A combined course in the areas of music theory, history, and literature. Five periods per week.

Music 261-262. Harmony. **(F,S)(3)**
Continuation of Music 161-162 in the area of part-writing and analysis. Advanced chromatic harmony of the middle Romantic period. Three periods per week. Prerequisite: Music 162.

Music 263-264. Ear-Training. **(F,S)(1)**
Sight-singing, ear-training, and dictation to be taken concurrently with Music 261-262. Two periods per week. Prerequisite: Music 162.

Music 361-362. Form and Analysis. **(F,S)(2)**
The development of musical forms from small units to large. Study of large scale analytic techniques including those necessary for late 19th and 20th century Music. Prerequisite: Music 262.

Music 365. Arranging. **(S)(2)**
Basic techniques of orchestration and arranging. Prerequisite: Music 162.

Music 461-462. Counterpoint. **(461 on demand, 462 F, even year)(2)**
The vocal counterpoint of Palestrina and the instrumental counterpoint of Bach. Prerequisite: Music 162.

Music 465. Theory Seminar. **(on demand)(3)**
An advanced course in music theory, including a study of contemporary practices. Prerequisite: Music 362, and permission of the instructor.

MUSIC EDUCATION

Music 171. String Instruments Class. **(F, even year)(1)**
Class instruction in strings.

Music 172. Woodwind Instruments Class. **(S, odd year)(1)**
Class instruction in woodwinds.

Music 173-174. Piano Class. **(F,S)(1)**
Class instruction in piano.

Music 175. Brass Instruments Class. **(F, odd year)(1)**
Class instruction in brass.

Music 176. Percussion Instruments Class. **(S, even year)(1)**
Class instruction in percussion.

Music 177-178. Voice Class. **(F,S)(1)**
Class study for students who are not prepared to study at the level of private applied voice.

Music 271. Music in the Public School. **(F)(2)**
Fundamentals of public school education with special emphasis on the philosophy and foundations of music education and the position of music within the entire curriculum. Includes directed observation of and participation in public school classroom activities.

Music 373. Elementary School Music. **(S)(3)**
Methods and Materials in the elementary school. Will include fundamental ability at the keyboard, the fundamentals of music, and library research. Includes directed observation of and participation in public school classroom activities for music majors.

Music 374. Vocal Methods for the Secondary School. **(F)(3)**
Materials, rehearsal techniques, and vocal health for the secondary school student. Includes directed observation of and participation in public school classroom activities. *Prerequisite:* Music 271 and Junior standing.

Music 375. Instrumental Methods & Materials. **(S)(2)**
Teaching Instrumental Music in the Public Schools: Procedures, techniques, curriculum, scheduling, administration, evaluation, materials, equipment, and community relations. Includes directed observation of and participation in public school classroom activities. *Prerequisite:* Music 171, 172, 175, 176, 271, and Junior standing.

Music 471. Marching Band Techniques. **(F)(2)**
Functions, organization, and direction of a school marching band program. *Prerequisite:* Music 271 and Junior standing.

Music 473. Choral Conducting. **(F, odd year)(2)**
Techniques and literature.

Music 474. Instrumental Conducting. **(F, even year)(2)**
Techniques and literature.

Music 475. Pedagogy. **(on demand)(2)**
Techniques and principles of private and class instruction, emphasis on recommended materials.

INDEPENDENT STUDY

Music 495. Independent Study. **(F,S)(2-3)**
Independent study and/or research on approved topics. Prerequisite: Permission of the student's major professor. May be repeated for credit.

III. DEPARTMENT OF RELIGION AND PHILOSOPHY

Robert D. Matthews, *Department Head*
Christian Education—Religion—Philosophy

Courses in this Department are designed to acquaint the student with the Judaeo-Christian tradition and the other great religious traditions of mankind and with the great traditions and disciplines of human thought; to deepen his awareness of himself and of the human community; to cultivate his powers of critical examination and the meaning and direction of human existence.

Studies in religion are especially recommended for students of art, history, and literature, and for students preparing for Christian vocations.

Studies in philosophy are especially recommended for pre-professional education for such vocations as the Christian ministry, college teaching, law, journalism, creative writing, and art, as well as for students of history, literature, and the sciences.

Pre-ministerial preparation. The American Association of Thoelogical Schools has stated that the college work of students planning to enter the ministry should result in at least the following: 1. Ability to speak and write English clearly and correctly, to think clearly, and to read at least one foreign language; 2. Acquaintance with the world of men and ideas, the world of nature, and the world of human affairs; and 3. A sense of achievement through the mastery of fields of study and through honors work or other independent study. The student is expected to become well grounded in English, philosophy, and history, and to gain some background in social studies (especially psychology and sociology), the natural sciences, languages, and religion.

CHRISTIAN EDUCATION

In recognition of increasing demand for trained young men and women as full-time Christian workers in the unordained ministry of the local church, to serve in the capacities of pastor's assistant, director of youth work, or Director of Christian Education, a specific four-year course of study has been arranged, using the facilities of various departments. It is designed to meet the basic needs of students who wish to go directly into church positions without graduate work.

A 24-hour major is recommended in Religion, including Religion 222, plus courses in music, drama, and Appalachian studies. A second major or minor in drama or music is often helpful. The following three courses should supplement the major:

Speech 131. Fundamentals of Speech
Physical Education 321. Recreational Leadership
Psychology 402. Counseling Theories and Techniques

RELIGION

Requirements for a Major: The twenty-four hour major, recommended for Christian Education and pre-ministerial students, must include courses 111, 112, 311, plus Philosophy 261. The thirty-hour major may include Philosophy 371.

Requirements for a Minor. Twenty-one semester hours, at least nine of which must be in courses numbered above 300.

Religion 101. Conference Studies. **(on demand)(0)**
A study of books required by the Methodist Church for the local preacher's license. Required of all recipients of ministerial loan-grants who have not yet obtained the license to preach.

Religion 111. Old Testament History, Literature, and Interpretation. **(F)(3)**
The history of Israel from the earliest times to the Maccabean Age. Historical and literary criticism and religious significance of the emergence of Judaism.

Religion 112. New Testament History, Literature, and Interpretation. **(S)(3)**
Attention to author, date, origin, historical and religious significance. Religion 111 recommended.

Religion 121. Primitive Religions. **(F)(3)**
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies. (Odd years only.) Students may not take both Religion 121 and 321.

Religion 127. Archaeology and the Old Testament. **(S)(3)**
Archaeological discoveries related to the Old Testament era. Students may not take both Religion 127 and 327.

Religion 201-202. Elementary New Testament Greek. **(F,S)(3)**
A semi-inductive approach to koine Greek, recommended for persons interested in religion as well as for religion majors.

Religion 212. Old Testament Prophets. **(F)(3)**
The nature of prophecy and the prophetic movement in Israel from its beginning with Moses to its close with the book of Jonah. (Even years only.)

Religion 222. Administration and Education in the Local Church. **(S)(3)**
Administrative responsibilities of the Director of Christian Education as related to the pastor, local church governing body, and the congregation. Theory and practice of Christian Education with special attention to planning a year's program in the local church.

Religion 231. The Life and Teachings of Jesus. **(S)(3)**
The world into which Jesus was born and an interpretation of his messianic consciousness, personality, activities, and teachings. Religion 112 recommended. (Even years only.)

Religion 241. The Life and Teachings of Paul. **(F)(3)**
The world of Paul, his life, teachings, and significance, using his letters as the primary source. Religion 112 recommended. (Even years only.)

Religion 301-302. Elementary Old Testament Hebrew. **(F,S)(3)**
A study of sufficient grammar to read simple Old Testament passages, recommended for persons interested in religion as well as for religion majors.

Religion 311. Introduction to Christian Thought. **(S)(3)**
Examination of traditional and contemporary understanding of the Christian faith, with emphasis on the nature of God and of man; the significance of Christ and the Church; the relation of religion to morality; the meaning of Creation and Redemption; and the interpretation of Human Destiny. *Prerequisite:* Religion 112. (Even years only.)

Religion 321. Primitive Religions. **(F)(3)**
Survey of the origins and characteristics of rites, legends, and myths of technologically undeveloped societies and examination of anthropological and psychological explanatory theories. (Odd years only.) Students may not take both Religion 121 and 321.

Religion 327. Archaeology and the Bible. **(S)(3)**
Archaeological discoveries related to the Old and New Testament eras, supplemented by wide reading in books, magazines and newspapers, and class reports, color slides and movies. Students may not take both Religion 127 and 327.

Religion 353. Church History. **(on demand)(3)**
The origin and development of the Christian Church from its beginning through the Reformation.

Religion 355. World Religions. **(S)(3)**
A descriptive account of the faith and practices of present-day world religions, with emphasis on Hinduism, Buddhism, Confucianism, Islam.

Religion 479. Seminar in Religion. **(on demand)(3)**
Intensive study on a special subject with oral and written reports. Possible topics include The Fourth Gospel, Apocalyptic Literature, Pauline Theology, Wisdom Literature, The Apostolic Period. *Prerequisite:* Advanced standing and permission of the instructor.

Religion 495. Independent Study. **(F,S)(3)**
Independent study or research on approved topics. May be repeated for credit.

PHILOSOPHY

Requirements for a Minor. Twenty-one semester hours.

Philosophy 151. Introduction to Philosophy. **(F,S)(3)**
Both a study of the nature of philosophy, its aims, problems, and methods, and an exercise in philosophizing in which the student clarifies constructively and evaluates critically his own and other understandings of life.

Philosophy 202. Logic. **(S)(3)**
Cultivation of rational acuity through an examination of the procedures and limits of rational discourse. (Odd years only.)

Philosophy 261. Philosophy of Religion. **(F)(3)**
An introduction to basic modern concepts, issues, and methods in the philosophical examination of religion. (Odd years only.)

Philosophy 371. Ethics. **(F)(3)**
Cultivation of reasoning in moral decision-making through an examination of traditional ethical theories, contemporary moral issues and the structure of moral decision.

Philosophy 376. History of Western Philosophy I: Ancient and Medievel. **(on demand)(3)**
Philosophical thinking in its cultural context, from its birth through the classical and medieval eras.

Philosophy 377. History of Western Philosophy II: Modern. **(on demand)(3)**
The rise and development of modern thought-forms through the nineteenth century.

Philosophy 378. History of Western Philosophy III: Contemporary. **(on demand)(3)**
Twentieth century western thinking and its nineteenth century backgrounds, with particular reference to modern idealism, phenomenology, existentialism, pragmatism and the analytical movement. *Prerequisite:* any philosophy course.

Philosophy 479. Seminar in Philosophy. **(on demand)(3)**
Intensive study of a special topic such as Epistemology, Metaphysics, Plato, Kant. Permission of instructor required.

Philosophy 495. Independent Study. **(F,S)(3)**
Independent study or research on approved topics. May be repeated for credit.

DIVISION OF NATURAL SCIENCES

Santaram Chilukuri, *Chairman*
Biology—Chemistry—Environmental Studies
General Science—Mathematics—Physics
Coal Mining Technology

PRE-PROFESSIONAL PROGRAMS

Since professional schools vary considerably in their admission requirements, the student is advised to select the professional school he wishes to attend later, and then choose pre-professional courses accordingly. The science faculty should be consulted before registration in order to assist the student in preparing a course schedule. For details of a specific program, the following faculty members should be consulted.

Dentistry—Nussbaum
Engineering—Chilukuri
Medical Technology—Rosen
Medicine—Nussbaum
Optometry—Nussbaum
Pharmacy—Khatri
Physical Therapy—Rosen
Veterinary Medicine—Nussbaum

PHYSICAL THERAPY

Union College provides a two year curriculum which allows students to complete courses required for entrance into the Physical Therapist Assistant (PTA) program at Jefferson Community College in Louisville or the Physical Therapy Program at the University of Kentucky in Lexington.

Union College and Jefferson Community College have entered into an agreement whereby students from southeastern Kentucky may work toward an Associate of Applied Science degree and qualify to be a PTA. The student will take courses at Union College during the first two years and complete the program at Jefferson Community College during the third year. Jefferson Community College reserves two positions annually for qualified Union College students. To qualify for graduation from this program, a student must also present a Red Cross First Aid Certificate earned within the last four years. Students who enter this program will be asked to state in writing their intent to return to southeastern Kentucky to work as PTAs.

The Department of Physical Therapy at the University of Kentucky has approved Union's coursework for the two year Pre-Professional Phase of their program. Admission to the Professional Phase at the University of Kentucky is based on competition and is not guaranteed.

DEGREE IN MEDICAL TECHNOLOGY

Union College has cooperative agreements with University of Louisville and The Methodist Hospital of Kentucky, Pikeville, in which the student attends Union College for three years and, upon acceptance, enters the cooperating institution and receives clinical training in medical technology for twelve months. On satisfactory completion of the program the student is awarded a bachelor's degree in medical technology and should be qualified for a national certifying examination.

COMBINED DEGREE IN ENGINEERING

A Cooperative "Three-Two Plan" has been worked out with the University of Kentucky and Auburn University in which the student attends Union College for three years pursuing certain pre-engineering courses in addition to a solid program in liberal arts. At the end of the three years, upon the recommendation of Union College, he enters the cooperating university or any accredited engineering school as a junior and in two additional years completes all the requirements for the B.S. degree in Engineering. Both the B.A. or B.S. from Union College and a B.S. in Engineering from the cooperating university are awarded at the end of the fifth year.

COMBINED DEGREES IN HEALTH SCIENCES

Students may elect a Bachelor's degree in pre-professional studies at Union College or may arrange for transfer to accredited medical, dental, veterinary medicine, optometry, or medical technology schools for their professional work after three years. On completion of the professional studies. they will also be awarded their Bachelor's degree from Union College. (See the section on Combined Degrees.)

SCIENCE EDUCATION MAJORS
(SPECIALIZATION FOR HIGH SCHOOL CERTIFICATION)

The following Areas of Concentration are acceptable for the requirements for the specialization component of the Provisional High School Certificate.

1. AREA IN MATHEMATICS-PHYSICAL SCIENCE
   The requirements are a total of 48 semester hours with 15 semester hours of chemistry; 15 semester hours of physics numbered 211 and above, including laboratory; 15 semester hours of mathematics numbered 241 and above; 3 semester hours of electives chosen from chemistry courses and physics courses numbered 211 and above, or mathematics courses numbered 241 and above. At least 18 semester hours must be in courses numbered 300 and above. See Department of Education for professional requirements.
2. AREA IN SCIENCE
   The requirements are a total of 48 semester hours with 12 semester hours of biology; 12 semester hours of chemistry; 12 semester hours of physics courses numbered 211 and above, including laboratory; envirnmental studies 350; 9 semester hours of electives chosen from biology, chemistry, or physics courses numbered 211 and above. At least 21 semester hours must be in either biology, chemistry, or physics. At least 18 semester hours must be in courses numbered 300 and above. See Department of Education for professional requirements.

BIOLOGY

Requirements for a Major: Thirty semester hours in Biology are required. Biology 111, 232, 233, 361, 441, and 452 must be included. Required science cognates consist of Math 111 and 211; Chemistry 111-112, and 131-132; Physics 101, 110, and 112; General Science 471. Recommended science cognates consist of Math 241; Chemistry 212, and 311-312; Physics 211-212, and 213-214 in place of the required physics courses at the 100 level.

Requirements for a Minor. Twenty-one semester hours in Biology are required. Biology 111, 232, and 233 must be included.

Biology 111. Introduction to Biology.* **(F,S,Sum)(4)**
A course emphasizing general concepts of modern biology for majors and non-majors. Topics surveyed include cell biology, bioenergetics, molecular and Mendelian genetics, reproduction, development, evolution, and ecology. Human relevance is stressed. Laboratory work is included. This course is a prerequisite to all other courses in biology.

Biology 151. Medical Terminology. **(F)(2)**
The study of the specialized terminology of medical science. Recommended for pre-professional students, biology majors, allied health students, and students in other health-related fields. This course does not meet the biological science requirement for teacher education.*Pre- or corequisite:* Biology 111 except in specific associate degree programs where this is not required.

Biology 232. General Zoology. **(S)(4)**
A survey of the animal kingdom with emphasis on animal diversity, evolution, and environmental relationships. Additional topics include energy metabolism, taxonomy, reproduction, population phenomena, behavior and sociobiology.

Biology 233. General Botany. **(F)(4)**
A survey of the plant kingdom from the blue-green algae through the flowering plants. Emphasis is given to morphology and to evolutionary relationships. Appropriate discussions of plant physiology, plant taxonomy, and human economic importance are included.

Biology 234. Microbiology. **(S)(4)**
An introduction to the classification, morphology, physiology, and genetics of the bacteria, fungi, viruses, and micrometazoans, and their roles in nature, health, and industry. Laboratory work stresses techniques for the culure and identification of microorganisms. A portion of the course is devoted to immunology.

Biology 315. Vertebrate Biology. **(4)**
The anatomy, physiology, taxonomy, ecology, behavior, and evolution of the vertebrate phyla with emphasis on the species endemic to southeastern Kentucky.

Biology 321. Field Biology. **(3)**
Field investigations including observation, collection, and identification of local fauna and flora are offered under discrete course headings including: Limnology, Ornithology, Entomology, Local Flora, Dendrology, and Mycology. Pertinent field data is collected and analyzed appropriately.

---

*See General Science 109 for a biology survey course for non-science majors.

Biology 330. Anatomy and Histology. **(F)(4)**
A study of the tissues, organs, and organ systems of vertebrates with emphasis on the human body in health-related sciences.

Biology 331. Human Physiology. **(S)(4)**
A study of the functioning of the human organ systems with normal and clinical considerations. Prerequisite: Chemistry 112 and 132.

Biology 350. Parasitology. **(F)(4)**
An intense study of protozoan and metazoan parasites with an emphasis on morphology, life cycles, pathology and control. The laboratory component emphasizes methods used to 1) necropsy host animals 2) prepare parasites for identification and 3) analyze host pathology by employing histological techniques. A slide collection of various parasites is required. *Prerequisites:* Biology 111 and Biology 232.

Biology 361. Genetics. **(F)(4)**
A study of the principles of inheritance including Mendelian, population, and cytogenetics. *Prerequisite:* Math 111. Prior completion of Behavioral Science 245 is recommended.

Biology 441. Ecology. **(4)**
A study of the relationships between organisms and their abiotic and biotic environment including biogeochemical cycles, population dynamics, diversity, and pollution of terrestrial and aquatic ecosystems. *Prerequisite:* Biology 232 and 233. Completion of Biology 361 is recommended.

Biology 452. Cell Biology. **(4)**
A sophisticated treatment of the structure, biochemistry, and functioning of life at the cellular level. Emphasis is given to bioenergetics, enzyme kinetics, molecular genetics, immunology, and organelle physiology. *Prerequisite:* Math 111, Chemistry 112, and sixteen hours in biology. Prior completion of physics and organic chemistry is recommended.

Biology 495. Independent Study and Research. **(F,S)(1-3)**
An introduction to the methods of science through original research. For advanced students who have demonstrated potential for performing an independent investigation of a substantive problem. The problem is chosen and carried out in collaboration with the instructor. A typewritten report in publication style is required.

CHEMISTRY

Requirements for a Major. Thirty semester hours of Chemistry including Chemistry 111, 112, 131, 132, 212, 311, 312, and 342. Science cognates consist of Physics 211, 212, 213, 214, 311; Mathematics 111, 241, 242; and General Science 471.

Requirements of a Minor: Twenty-one semester hours which should include Chemistry 111, 112, 131 and 132, 311 and 312.

Chemistry 111-112. General Chemistry. **(F,S)(3)**
A systematic study of the fundamentals and applications of the experimental and theoretical laws of chemistry. Major topics include nomenclature, stoichiometry, chemical thermodynamics, equilibrium, acid-base reactions, atomic and molecular theory and structure, chemical kinetics and nuclear chemistry. Examples and problems are drawn from all areas of chemistry. Concurrent registration in General Chemistry Laboratory, Chemistry 131-132, is highly recommended for all students. *Prerequisite:* Math 111 which may be taken concurrently.

Chemistry 131-132. General Chemistry Laboratory. **(F,S)(1)**
Laboratory experiments in general chemistry that illustrate basic principles and develop laboratory skills. Experiments are coordinated with the General Chemistry topics. Inorganic qualitative analysis is included in Chemistry 132. Three hours of laboratory per week. Concurrent registration or previous completion of Chemistry 111-112 is required. No credit may be received for Chemistry Laboratory 131-132 without the simultaneous or prior completion of the corresponding lecture courses Chemistry 111-112.

Chemistry 212. Quantitative Analysis. **(F)(4)**
A study of important volumetric and gravimetric analyses presented from a modern theoretical standpoint. Also an introduction to the study of advanced methods of analysis including some newer instrumentation techniques. *Prerequisite:* Chemistry 112 and 132.

Chemistry 311-312. Organic Chemistry. **(F,S)(4)**
A course in the chemistry of organic compounds. Unitized laboratory work is designed to illustrate the basic principles of organic chemistry. *Prerequisite:* Chemistry 112 and 132.

Chemistry 342. Physical Chemistry. **(S)(4)**
A study of atomic structures and chemical bonding in terms of modern quantum theory. Topics include molecular spectra, physical methods of investigation and chemical kinetics. *Prerequisite:* Math 242 and Physics 212. (Even years only.)

Chemistry 411. Inorganic Chemistry. **(F)(4)**
A systematic study of the structure, properties and reactions of non-carbon elements, with emphasis on the non-metals and the transition metals. Topics include atomic-molecular structure and bonding, physical methods of investigation, organometallic chemistry and bioinorganic chemistry. *Prerequisite:* Chemistry 312. (Odd years only.)

Chemistry 495. Special Problems. **(F,S)(3)**
This is an introduction to the methods of scientific research. The course is designed for the advanced student who has demonstrated ability to do independent work in Chemistry. It will consist of a particular problem decided upon after consultation with the instructor. Upon conclusion of the work a typewritten and bound report-thesis may be required. An examination may or may not be given, depending on the nature of the problem.

ENVIRONMENTAL STUDIES

Requirements for a Minor. Twenty-four hours, to be chosen by the student, the student's major advisor, and an advisor from the Environmental Studies Program. Courses are also listed under the various departments to which they relate. The required core: Environmental Studies 100, Biology 111, Economics 251 or Sociology 251 and Environmental Studies 313. The remainder of the courses are to be chosen from other environmental Studies courses or the following recommended electives: Biology 315, 321, 441; Geography 241; Mathematics 125; Philosophy 371; Sociology 311, 371, 421 and certain experimental courses.

Environmental Studies 101. Man and His Environment. **(F)(3)**
A multi-disciplinary course in which basic ecological principles are developed and used to show human impact on natural eco-systems. Topics include endangered species, impact of population growth, land use and management problems, food production and demands.

Environmental Studies 110. Physical Systems of the Environment. **(S)(4)**
A study of the physical environment as the home of man. Emphasis on distribution and interaction of environmental variables (weather, landforms, vegetation, soils, and climate). This course may be used to fulfill the physical science requirement for students seeking teacher certification. Laboratory activities included.

Environmental Studies 113. Geology of Coal. **(S)(3)**
Introduction to Physical Geology, with an emphasis on the geology of coal; environmental problems and energy needs will be explored.

Environmental Studies 244. Reclamation and Land Use. **(S)(3)**
A detailed study of how surface mining affects the natural environment and the processes used to reclaim the land and restore it to a natural and/or useful state. *Prerequisite:* Coal Tech. 242.

Environmental Studies 313. Environmental Policy. **(F)(3)**
A study of the decision-making processes and the consequences of alternative courses of action on environmental quality. Analyzes the impact of public opinion, the various branches of government and pressure groups on environmental/energy policies at the federal and state levels. *Prerequisites:* Environmental Studies 101 and an introductory political science course, or permission of instructor. (Odd years only.)

Environmental Studies 350. Man's Geologic Environment. **(S)(4)**
Significance of regional and local geological features and processes in land use planning. Use of geological information to reduce conflicts in utilization of mineral and water resources and damage due to natural hazards. *Prerequisites:* Environmental Studies 110 or Environmental Studies 113. (Odd years only.)

Environmental Studies 469. The Appalachian Environment. **(Sum)(3)**
Conservation of natural resources including soil, water, wildlife and forests as interrelated components of the environment. Current problems relating to the environmental quality of the Appalachian region. *Prerequisites:* Two courses in environmental studies or biology and an introductory economics course.

Environmental Studies 487. Field Practicum in Environmental Studies.

GENERAL SCIENCE

Neither a major nor a minor is offered.

Gen. Science 109. Ecological and Organismal Biology. **(3)**
A course designed for non majors intended as an introduction to the principles of biology through a survey of the major animal and plant groups. The morphological features of the taxonomic groups characteristic of southeastern Kentucky with attention to their adaptations to natural habitats will be emphasized.

Gen. Science 110. Ecological and Organismal Biology Lab. **(1)**
Optional lab to accompany General Science 109.

Gen. Science 114. Introduction to Astronomy. **(S)(4)**
An introduction to the elements of astronomy. Constellation identification, telescope operation, properties of the moon and planets, solar features, stars, galaxies, and cosmology.

Gen. Science 124. Introduction to Physical Therapy. **(S)(2)**
A general orientation to the historical background, philosophy and professional ethics of physical therapy, interprofessional relationships between members of the health care team; concepts of health and disease; overview of the total medical spectrum, medical technology, modalities used in physical therapy, and orientation to clinical service departments and their administration.

Gen. Science 401. Science: Concepts, Processes and Inquiry. **(S)(3)**
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, experimenting, etc. With the laboratory materials from the new science program he will explore their use in teaching children these processes. As materials from such programs as ESS, SSIS IME, IIS, ISCS, PSSC, PHYSICS, CHEMS, etc., are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching science will be stressed along with individualized instruction, learning theory, laboratory equipment use (commercial and home-made) and multimedia instruction.

Gen. Science 471. Science Seminar. **(S)(1)**
A lecture/discussion of selected topics of interest, led by faculty members of the Division of Natural Sciences, invited speakers, and student participants. May be repeated once; a student can earn a maximum to two credit hours through this course. All natural science majors must take this course at least once. *Prerequisite:* Natural science major with Junior or Senior standing, or permission of the instructor.

MATHEMATICS

Requirements for a Major: Thirty semester hours consisting of mathematics courses numbered 241 and above; Physics 211, 212, 213, and 214.

Requirements for a Minor: Twenty-one semester hours consisting of mathematics courses numbered 241 and above, and including Mathematics 241 and 242.

Mathematics 100. Elements of Mathematics. **(F,S)(3)**
This course is intended for students who need to improve their arithmetic and elementary algebra skills to taking other mathematics courses or courses requiring quantitative reasoning. The course includes a brief review of whole number arithmetic (particularly prime factorization, exponents, and perfect squares), an extensive review of fractions, decimals, ratio and proportion, percent, and an introduction to algebra (including arithmetic of integers, algebraic expressions, and linear equations).

Mathematics 108. Intermediate Algebra. **(F)(3)**
This course is intended for students with a weak background in high school algebra who want to know more about the subject and/or plan to take Mathematics III, College Algebra and Trigonometry. The course includes a review of the real number system (particularly integers and irrational numbers), operations with polynomials, operations with algebraic fractions, simplification of radical expressions, solutions of equations and inequalities (linear, quadratic, higher order, and simultaneous), and an introduction to graphs and functions. *Prerequisite:* Successful performance on entrance exam covering arithmetic and elementary algebra (given on first day of class).

Mathematics 111. College Algebra and Trigonometry. **(F,S)(4)**
Brief review of intermediate algebra including expressions, equations, and inequalities; graphs of relations; functions as a special type of relation; graphs of functions; systematic graphing, combining functions and finding inverses; exponential and logarithmic functions; solving simultaneous equations using matrix methods; right triangle trigonometry; general trigonometry; trigonometric functions, their graphs and inverses; trigonometric identities and equations.

Mathematics 125. Graphic Analysis. **(F)(3)**
Basic map reading for geologic and topographic maps, scaled drawings, use of planimeter, excavation sections, coal tonnage estimation, methods and procedures of three-dimensional modeling from topographic maps as a basis of engineering calculations.

Mathematics 203-204. Structure of the Number System. **(F,S)(3)**
Historical development of the numeration system from an intuitive to a logical approach based upon set theory, definitions of the basic operations on whole numbers and their properties extended to integers, rationals, and irrationals; study of why and how of algorithms for all operations; topics in informal geometry.

Mathematics 211. Basic Statistics. **(S)(3)**
Basic concepts of descriptive and inferential statistics. Illustrations of applications in the fields of education, business, sociology, psychology, and natural science. *Prerequisite:* high-school algebra or permission of the instructor.

Mathematics 232. Surveying. **(S)(3)**
Principles, calculations, and field practice in surveying, measuring distances and elevations, stadia method, map reading, land areas, care and use of instruments. *Prerequisite:* Mathematics 108 or equivalent, or permission of the instructor.

Mathematics 241. Intro. to Calculus and Analytic Geometry. **(S)(4)**
Inequalities, the straight line, conic sections, limits, the derivative, differentiation of algebraic functions, applications of the derivative, extrema, and the antiderivative. *Prerequisite:* Mathematics 111 or permission of instructor.

Mathematics 242. Intermediate Calculus and Analytic Geometry. **(F)(4)**
The integral, applications of the integral, logarithmic and exponential functions, trigonometric functions, hyperbolic functions, techniques of integration, L'Hospital's Rule and indeterminate forms, and improper integrals. *Prerequisite:* Mathematics 241.

Mathematics 243. Advanced Calculus and Analytic Geometry. **(S)(4)**
Topics selected from polar coordinates, vectors, solid analytic geometry, partial differentiation, multiple integration, infinite series, and differential equations. *Prerequisite:* Mathematics 242.

Mathematics 331. Introduction to Linear Algebra. **(F)(3)**
Vector algebra in Euclidean spaces, lines and planes in space, matrices and linear equations, groups, and rings. *Prerequisite:* Math 111 and the permission of the instructor. (Odd years only.)

Mathematics 332. Linear Algebra. **(S)(3)**
Vector spaces, subspaces, linear independence, linear transformations, determinants, inner product spaces, orthogonality, and unitary transformations. *Prerequisite:*Mathematics 331. (Odd years only.)

Mathematics 372. Probability and Mathematical Statistics. **(F)(3)**
Theoretical probability using point set approach, probability as a frequency ratio; probability for finite sample spaces; conditional probability; joint and continuous distributions, binominal distribution; Baye's theorem; statistical applications of probability; theory of sampling and variance. *Prerequisite:* Mathematics 242, which may be taken concurrently, and permission of the instructor. (Even years only.)

Mathematics 402. Functions of a Complex Variable. **(on demand)(S)(3)**
Complex numbers, analytic functions, elementary functions of a complex variable, Cauchy's formula, Liouville's theorem, Laurent's series, residues, contour integration, conformal mapping, physical applications. (Even years only.)

Mathematics 403. Introduction to Analysis. **(on demand)(F)(3)**
Sets and functions, topological ideas, LUB property, real sequences, continuity, mean value theorems, integration, definite integrals, Taylor's theorems, improper integrals, convergence of infinite series, power series, improper integrals with parameter. (Even years only.)

Mathematics 471. Differential Equations. **(S)(3)**
Differential equations of first order and first degree, differential equations of first order and higher degree, differential operators and linear differential equations, reduction of order. *Prerequisite:* Mathematics 242. (Even years only.)

Mathematics 495. Independent Study. **(F,S)(3)**
Independent work on topics selected to meet the student's needs. For Mathematics majors only.

PHYSICS

Requirements for a Major: Thirty semester hours consisting of physics courses numbered 211 and above, including Physics 211, 212, 213, and 214. Science cognates consist of Chemistry 111, 112, 131, 132, and General Science 471.

Requirements for a Minor: Twenty-one semester hours of physics courses numbered 211 and above, including Physics 211, 212, 213, and 214.

Physics 101. Survey of Physics. **(F)(3)**
A descriptive introduction to physics covering some of the ideas of modern physics. Scientific theories, speed of light, energy, wave motion, heat engines, electromagnetic spectrum, nuclear energy, beyond the solar system.

Physics 103. Survey of Physics Laboratory. **(F)(1)**
Experiments and activities that illustrate basic principles of physics and develop laboratory skills. Experiments are coordinated with Physics 101.

Physics 111-112. Elements of General Physics. **(F,S)(3)**
This course is intended for life science and non-science students. Mechanics of motion and equilibrium; properties of solids, liquids and gases; thermal phenomena; wave motion and vibrations; electricity and magnetism, optics; topics in modern physics. Does not count toward minor. *Prerequisite:* High school Algebra or permission of the instructor.

Physics 113-114. Elements of General Physics Laboratory. **(F,S)(1-1)**
Laboratory experiments in mechanics, heat, sound, electricity, and magnetism that illustrate basic principles and develop laboratory skills.

Physics 211-212. General Physics. **(F,S)(4)**
Mechanics of solids, liquids and gases; laws of thermodynamics; kinetic-molecular theory, vibrating bodies; wave physics; laws of Coulomb, Faraday, Ampere, Ohm, Joule, and Lenz; electromagnetism; optics; photoelectric and Compton effects; nuclear energy; relativistic effects. *Prerequisite:* Mathematics 241.

Physics 213-214. General Physics Laboratory. **(F,S)(1)**
A general physics laboratory course involving experiments in mechanics, heat, sound, electricity, magnetism, optics and modern physics. Experiments are coordinated with Physics 211-212.

Physics 301. Principles of Modern Physics. **(F)(3)**
Special relativity, elementary concepts of quantum mechanics, selected topics in atomic and nuclear physics. *Prerequisite:* Physics 212 and Mathematics 242.

Physics 310. Statics. **(S)(3)**
Study of force systems on bodies at rest. Applications of conditions of equilibrium to coplanar and space systems. Virtual work, centroids, moments of inertia, and products of inertia. *Prerequisite:* Physics 211.

Physics 311. Heat and Thermodynamics. **(F)(4)**
Thermodynamic systems and processes, equations of state, PVT surfaces of real substances, laws of thermodynamics, energy equations, enthalpy, entropy, and thermodynamic potentials, applications of thermodynamics to simple systems, kinetic theory. *Prerequisites:* Physics 212, and Mathematics 242.

Physics 312. Electricity and Magnetism. **(on demand)(4)**
Electric charges, forces, field and potential with associated magnetic forces and fields; dielectric theory; capacitance, inductance, resonance, oscillations; series, parallel DC and AC circuits; measuring instruments; Maxwell's equations and electromagnetic waves. *Prerequisite:* Physics 212.

Physics 411. Dynamics. **(on demand)(3)**
Motion of a particle, systems of particles, rigid bodies; moving coordinate systems; Lagrange's equations; small oscillations. *Prerequisites:* Physics 212 and Mathematics 242.

Physics 412. Physical Optics. **(on demand)(4)**
Wave propagation and superposition; interference, diffraction, absorption, dispersion, polarization, double refraction, interaction of radiation with matter, laser theory; theory of selected optical instruments. *Prerequisite:* Physics 212.

Physics 495. Independent Study. **(F,S)(3)**

COAL MINING TECHNOLOGY

Union College offers 3 programs in Coal Technology.

I. Associate of Applied Science (AAS) - a 2-year program

II. A minor in Coal Mining Technology

III. A major in Mining Management - a 4-year program

The Coal Mining Technology Program is designed to provide the technical skills and knowledge that will qualify students for jobs or enable them to advance their careers in coal mining and related industries.

The Coal Mining Technology curriculum was developed in part by an advisory board of mining industry representatives. Their input ensures that the Union College Coal Mining Technology Program meets the needs of the coal industry and that students who graduate from the program will have the training they need for jobs in the coal industry.

I. Requirements for the 2-year AAS degree.

A. Common courses required of all candidates

			Semester hours
COAL	111	Introduction to Coal Mining	3
COAL	112	First Aid and Safety	3
COAL	121	Mining Law	3
ENVS	113	Geology of Coal	3
MATH	125	Graphic Analysis	3
MATH	232	Surveying	3
COAL	220	Mining Economics	3
COAL	235	Coal and Water Analysis	3
COAL	246	Dust, Noise and Illumination	3
BUAD	352	Principles of Management	3
ENGL	111	Freshman Composition	3
ENGL	112	Freshman Composition	3
MATH		Math Elective, Intermediate	3
		Humanities Elective	3
		Social Science Elective	3
			45

B. Emphasis Courses

Underground Mining - 15 hours or **Surface Mining -** 15 hours

Required:

COAL	240	Fundamentals of Roof Control	3
COAL	241	Mine Gases & Ventilation	3
COAL	245	Underground Mining Methods	3

Required:

COAL	242	Surface Mining Methods	3
COAL	243	Explosives & Blasting	3
ENVS	244	Reclamation & Land Use	3

Electives:

COAL	248	Coal Preparation	3
COAL	232	Mine Electricity	3
COAL	258	Field Experience*	3

C. Free Electives - 6 hours

Grand Total - 66 hours

Experienced students may substitute other courses from the Emphasis List.

II. Requirements for a Minor in Coal Mining Technology: Union College also offers a minor in Coal Mining Technology as part of a four-year Bachelor of Science degree program. It enables students in business, science, the health professions, and other fields to take courses that will complement their chosen professions and better prepare them for careers in the coal industry or in allied fields.

Requirements consist of twenty-one semester hours in Coal Mining Technology, including Coal Technology 111, 112, or 121, and Mathematics 125. The remaining nine semester hours should be selected in consultation with the student's advisor so as to meet his or her career goals.

III. Requirements for the mining management major.

A. Completion of the requirements for the AAS in Coal Technology

B. Completion of the general studies requirements

C. Completion of the following 30 hours major:

COAL 220	Mining Economics	BUAD 311 or 312	Business Law
COMP	A computer language	BUAD 321	Principles of Marketing
ECON 251	Environmental Economics	or	
ACTG 271	Principles of Accounting	BUAD 351	Principles of Finance
ACTG 272	Principles of Accounting	BUAD 352	Principles of Management
OFAD 302	Business Communications	BUAD 372	Personal Management

Coal Tech. 111. Introduction to Coal Mining. **(F)(3)**
Principles and practices of surface and underground mining, methods, equipment, field trips, miner responsibilities, safety practices. (Part I of training for inexperienced miners—surface and underground.)

Coal Tech. 112. First Aid and Safety. **(F)(3)**
Instruction in MSHA approved first-aid procedures for all types of accidents, CPR training, and principles of accident prevention. (Part II of training for inexperienced miners—surface and underground.)

Coal Tech. 121. Mining Law. **(S)(3)**
A study of underground and surface mining laws and their relationship to mine management and operation. MSHA Health & Safety Regulation.

Coal Tech. 220. Mine Economics. **(S)(3)**
Introduction to the operational cost of mining (surface and underground) in the following areas: Engineering, equipment, taxes, fees, royalties, transportation, office management, MSHA, OSM, preparation plant, and coal market.

Coal Tech. 232. Mine Electricity. **(F)(3)**
D.C. and A.C. theory and applications, motors, transformers, power equipment, circuits, and circuit protections, control circuits, diagrams and equipment trouble shooting, and basic solid state. *Prerequisites:* Mathematics 108 or permission of instructor.

Coal Tech. 235. Coal and Water Analysis. **(S)(3)**
A study of the chemical properties of coal and water, and an introduction to analytical principles, sampling methods, and statistical treatment of data used in coal and water laboratories. *Prerequisite:* Mathematics 108 or consent of instructor.

Coal Tech. 240. Fundamentals of Roof Control. **(F)(3)**
A study of stress factors on roofs, types of roof bolts, machinery, types of mine roofs, testing and controlling roofs, and roof control plans.

Coal Tech. 241. Mine Gases and Ventilation. **(F)(3)**
Mine Gases: Physical and chemical properties of mine gases, effect on miners, gas detection devices, and safety procedures. Ventilation: Methods, ventilation devices, required air movement, ventilation plans, and effect on mine gases.

Coal Tech. 242. Surface Mining Methods. **(F)(3)**
A study of the principles and practices of surface mining. Topics: Surface mining methods, matching method to topography, equipment, and mining regulations.

Coal Tech. 243. Explosives and Blasting. **(F)(3)**
Methods of using explosives and the latest techniques in blasting for both surface and underground. Safety and economy will be emphasized. *Prerequisite:* Mathematics 100 or equivalent, or consent of instructor.

Coal Tech. 245. Underground Mining Methods. **(S)(3)**
A detailed study of the methods of underground mining: matching equipment to mining situations, mine designs for safety and efficiency, coal seams—locations and physical and chemical properties, new technology. *Prerequisite:* Coal Tech. 240 or 241.

Coal Tech. 246. Dust, Noise, and Illumination. **(S)(3)**
A study of dust, noise, and illumination problems in a mining situation. The following will be discussed under each category: history of regulations, reasons for health standards, physical properties, instruments and methods of use.

Coal Tech. 248. Coal Preparation. **(F)(3)**
A study of the various aspects and methods of coal preparation including sampling, washing, crushing, the science of separation processes such as dense-media and froth flotation, refuse removal and disposal.

Coal Tech. 285. Field Experience in Coal Technology. **(F,S,Sum)(3)**
A directed field experience in some phases of coal mining with consideration given to the needs and interests of the student. Students with prior experience may elect to substitute 2 Coal Technology emphasis courses, with permission of the director. *Prerequisite:* Coal Tech. 111 and 112 or equivalent and 15 hours credit.

DIVISION OF SOCIAL SCIENCES

John C. Taylor, Chairman
Appalachian Studies and Appalachian Semester
Anthropology—Behavioral Sciences—Geography
History—Political Science—Pre-Law—Psychology
Sociology—Area in Social Studies Education

ANTHROPOLOGY

Anthropology 221. Introduction to Cultural Anthropology. **(S)(3)**
A survey of the archaeological and biological history of mankind as it relates to the development of man in his culture, with comparisons drawn between the cultures of primitive people and Western Civilizations.

Anthropology 251. North American Indian Cultures. **(F)(3)**
The historical development of North American Indian technology, and the cross-cultural study of four diverse Indian cultures at the time of White contact, will be the main focus of this Economics, ecology, technology, role relations, medicine, politics and conflict will be the focus of study in each culture.

BEHAVIORAL SCIENCES

The two departmental courses listed below are "core" courses in the Behavioral Sciences curriculum. Both courses are required as a part ot the Psychology and Sociology majors and minors.

Behavioral Science 245. Basic Statistics: Theory and Application. **(F,S)(3)**
Basic concepts of descriptive and inferential statistics, illustrations of applications in the fields of sociology, psychology, business, education, and natural science. Should demonstrate a proficiency in basic mathematics and algebra as determined by grades in Mathematics 100 or on a placement test.

Behavioral Science 341. Methods of Behavioral Science Research. **(S)(3)**
Techniques of behavioral sciences research, including survey design and the collection, analysis, and interpretation of data. Lecture and laboratory.

PSYCHOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Psychology 111, 210, 352, 361 and 460.

Requirements for a Minor: Twenty-one semester hours, including behavioral Sciences 245, 341, Psychology 111, 210, and 361.

Psychology 111. Introduction to Psychology. **(F,S)(3)**
Emphasis on the study of human behavior and the ability of the individual to make adjustments to his environment.

Psychology 201. Psychology of Personal Adjustment. **(on demand)(3)**
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustment.

Psychology 210. Child Development. **(S)(3)**
Emphasis on recent child development theories with laboratory experiences with children on a one-to-one basis.

Psychology 330. Social Psychology. **(S)(3)**
Major emphasis is on problems involved in human relations. Designed to help the individual to understand and adjust to group thought and action. Attention is given to recent psychological and sociological research in human relations.

Psychology 352. Abnormal Psychology. **(S)(3)**
Mental disorder, changing conceptions of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

Psychology 361. Psychology of Learning. **(F)(3)**
Basic concepts and principles of learning with emphasis upon human and animal laboratory studies.

Psychology 402. Counseling Theories and Techniques. **(F)(3)**
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing. Permission of the instructor required.

Psychology 460. Theories of Personality. **(F)(3)**
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological and stimulus-response theories included.

Psychology 461. History and Systems of Psychology. **(on demand)(3)**
Origins of psychological thought within science and philosophy, tracing the development of systems and theories within German, British, and American psychology.

Psychology 470. Theories of Learning. **(S)(3)**
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories.

Psychology 495. Independent Study. **(F,S,Sum)(1-3)**

SOCIOLOGY

Requirements for a Major: Thirty semester hours, including Behavioral Sciences 245, 341, Sociology 131, 460. Psychology 330 is strongly recommended and will be credited toward the thrity semester hour requirement.

Requirements for a Minor. Twenty-one semester hours, including Behavioral Sciences 245, 341, Sociology 131. Psychology 330 is strongly recommended and will be credited toward the twenty-one semester hour requirement.

Appalachian Semester courses having a sociology prefix may count toward both the major and minor.

Sociology 131. Introduction to Sociology. **(F,S)(3)**
The social interaction of persons and groups; man's cultural heritage and social nature; analysis and principles of group life; forms of collective behavior; the process of socialization; social structure, interaction and reorganization, including race relations and social class; a variety of social institutions; the family, education, religion; the economy and politics; social change.

Sociology 241. Sociology of Appalachia. **(S)(3)**
Uses the basic principles and concepts of Sociology to study life in the Appalachian region. The areas of study include socio-economic class, culture, folklore, social institutions, the family, religion, schooling, poverty, and development.

Sociology 251. Current Socio-Economic Problems. **(F)(3)**
Scientific understanding of social problems; problem areas in contemporary American society; types of personal disorders and role impairment; the influences of social change on the structure of society. Attention is also given to the question of why certain forms of deviance become defined as social problems.

Sociology 255. Selected Topics in Political Sociology. **(on demand)(3)**
A series of seminars and small group discussions organized around a set of case readings in the area.

Sociology 271. Marriage and the Family. **(S)(3)**
Background experiences in the lives of young people leading up to courtship and marriage; the establishment and functioning of the home, with related biological and social factors. Emphasis upon changing attitudes toward family relationships, some of the problems involved and suggested solutions.

Sociology 311. Human Ecology. **(S)(3)**
Population distribution, growth, composition, and its relevance to current economic, social, and political problems. (Odd years only.)

Sociology 353. Minority Groups. **(on demand)(3)**
A social scientific study of the origin and organization of minorities and their effect on society, with particular emphasis on minorities in the United States.

Sociology 371. Social Institutions. **(F)(3)**
An examination of the structure and function of social institutions, with primary orientation within the American milieu. Particular emphasis on socialization, stratification, social change, and relations among institutions. (Odd years only.)

Sociology 421. Rural and Urban Sociology. **(F)(3)**
Comparative and interrelated study of urban and rural life considering physical, institutional,social and economic factors of modern life in cities and in the countryside.

Sociology 433. Social Change. **(F)(3)**
This course introduces students to the problems of development and change. Examples will be drawn from Third World models of development, nationalism, imperialism, environmentalism, and human rights. The course is interdisciplinary, with emphasis on historical, economic, environmental and sociological apsects.

Sociology 460. Sociological Theory. **(F)(3)**
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

Sociology 464. Sociology of Deviance and Criminology. **(S)(3)**
This course will develop an understanding of the social definitions and implications of deviance. Various types of deviant behavior and relevant theories of society will be addressed.

Sociology 495. Independent Study. **(on demand)(1-3)**

PRE-LAW

Most law school admissions committees require a student to have a four-year college program leading to the Bachelor of Arts or Bachelor of Science degree plus an acceptable score on the Law School Admissions Test. Majors may be in any area although most students tend to take business or social science majors of some type. Students may also elect an individualized major (See Special Programs Section) to prepare themselves for law school. Regardless of the major, elective hours in accounting, business, history, political science, philosophy, and English prove helpful.

HISTORY

Requirements for a Major: Thirty hours of history including History 130, 131, and 200. At least 12 hours must be U.S. History and 12 hours must be non-U.S. History.

Requirements for a Minor: 21 semester hours in history; including History 130 and 131. At least 9 hours must be in U.S. History and 9 in non-U.S. History.

History 130. Survey of Western Civilization: Ancient through Medieval. **(F,S)(3)**

History 131. Survey of Western Civilization: Renaissance to Present. **(S)(3)**

History 200. Historical Research and Methods. **(F)(3)**
Gathering and criticism of data; bibliographies and aids; problems in historiography, compositon analysis, and the final monograph. History majors should take this course in their sophomore year.

History 201. United States History to 1865. **(F)(3)**
A survey of American history through the Civil War, tracing the development of the American nation. Stress is placed on the nature of Colonial society; the American Revolution; the creation of a national government; the influence of Jackson, and the Civil War.

History 202. United States History since 1865. **(S)(3)**
A survey of American history to present times tracing the rise of America as a world power. Emphasis is on the changes of industrialization; the loss of civil rights; protest and reform; the Depression; and American influence in the world.

History 233. History of Appalachia. **(Sum,F)(3)**
A survey of the region from settlement to the present time. The course focuses especially on the impact of the frontier experience, the Civil War and industrialization. "How is Appalachia both similar to and different from the rest of America?" is a major question addressed by the course.

History 241. American Economic History. **(S)(3)**
Examination of the economic forces shaping the development of the American Nation. Topical consideration of mercantilism; the rise of capitalism; slavery; the shocks of industrialization; the New Deal; and criticism of American economic power and capitalism. (Even years only.)

History 311. United States Colonial and Revolutionary Eras (1600-1815). **(F)(3)**
An examination of the conflicting historical interpretations of these eras. Topics emphasized will be Puritanism; Colonial society; reasons for the Revolution; the meaning of the Constitution; and the nation's early problems. (Odd years only.)

History 312. Jacksonian Era & the Civil War (1815-1865). **(S)(3)**
Emphasis on the conflicting historical interpretations of Jacksonian America and the Civil War. Topics include the Second Political Party System; slavery; expansion; and the causes of the Civil War. (Odd years only.)

History 313. Industrial America (1865-1919). **(F)(3)**
A consideration of the conflicting historical interpretations of the period. Topics emphasized include the loss of Civil Rights; the nature of the Gilded Age; Populist and Progressive Reforms; and World War I. (Even years only.)

History 323. Latin America. **(on demand)(3)**
A survey of Latin American history from the discoveries by Columbus to the present with the major emphasis on Mexico and the Caribbean.

History 330. Renaissance and Reformation: Europe (1350-1648). **(F)(3)**
An examination of historical transition from feudalism to primitive capitalism, from political localism to national monarchy, from religious life to secular life. (Even years only.)

History 331. Early Modern Europe(1648-1815). **(S)(3)**
A theoretical and historical appreciation of the birth, development and implications of the following institutions: mercantilism and merchant capitalism, the birth of the nation-state, the emergence of political democracy, European global expansion and early industrial society. (Even years only.)

History 332. Modern Europe. **(S)(3)**
Emphasis on the dual revolutions in Europe, industrial and political, and European and global implications: nationalism, socialism, liberalism, and communism.

History 345. American Constitutional History: Civil and Political Rights. **(F))3)**
An examination of the influence of the Supreme Court with primary stress given to political and civil rights. Major consideration is the modern and Warren Supreme Court. (Even years only.)

History 421. The Middle Period (1821-1850). **(F)(3)**
A detailed examination of Jackson, politics, and the culture of the period. Stress is placed on reform and the predominance of change in American life, and conflicting interpretations of the period. (Even years only.)

History 442. Britain in the 20th Century. **(S)(3)**
Britain in a period of economic decline, de-colonization and the resultant crisis for her domestic institutions: social conflict and the response of labor, communications and the struggle for cultural dominance. (Even years only.)

History 446. History of Russia. **(F)(3)**
Russian History since 1600. Emphasis on the relation of economic development and social class to royal absolutism, bureaucratic absolutism and the emergence and development of the Soviet State. (Odd years only.)

History 470. Twentieth Century America. **(S)(3)**
Selected topics on the nation's history since 1900, including the New Deal, Viet Nam, and Watergate. (Odd years only.)

History 495. Independent Study. **(F,S,Sum)(3)**

POLITICAL SCIENCE

Political Science 101. American National Government. **(F)(3)**
A survey of the principal characteristics of the American National Government; examination of constitutional principles, federalism, political participation, institutions of government, and the politics of public policy.

Political Science 231. International Politics. **(F)(3)**
Basic historical, economic, and cultural factors in the international political system. The rise and development of Western nation-state systems; the foundations of national power; sovereignty, nationalism and imperialism; the development of international orgainizations and cooperation.

Political Science 305. American Political Parties and Politics. **(S)(3)**
The organization, functions, and practices of political parties in the United States, their methods of influencing public opinion, their role in nominations and elections, and their impact on popular government. (Even years only.)

Poltical Science 308. The American Presidency. **(S)(3)**
Analysis of the institution of the presidency, its functions, formal and informal relationships, and its limitations within the American political system. (Odd years only.)

Political Science 461. Administrative Management. **(S)(3)**
Methods of applying administrative principles to the operation of government agencies. Relevance of administrative theory to management procedures in government; the relation of policy formation and implementation to the administrative policy system environment. (On demand)

GEOGRAPHY

Geography 101. Introduction to Geography. (S)(3)
Emphasis on the concepts of place, region, spatial interaction, landscape interpretation and landscape evolution. Deals with the graphic media of geography—maps, graphs, scale models. Case studies illustrate geographic principles to familiarize students with various parts of the world. For future teachers as well as students of the natural and social sciences.

Geography 241. Geography of Appalachia. (F)(3)
A systematic analysis of the physical, demographic, economic and cultural characteristics of the Appalachian landscape, with comparative significance for other regions. Includes field study.

APPALACHIAN STUDIES

An interdisciplinary minor in Appalachian Studies is available to interested students. Courses involving the study of Appalachia may be found throughout this catalog.

Requirements for a Minor: Twenty-one semester hours chosen from the following: Behavioral Sciences 341 or History 200; Coal Technology 111; Environmental Studies 313 and 469; Geography 241; History 233; and Sociology 241. Participation in the Appalachian Semester may also be counted toward a minor in Appalachian Studies. Relevant independent study projects and a specialized field practicum are also recommended.

APPALACHIAN SEMESTER

L. James Cox, *Coordinator*

The Appalachian Semester offers mature students a unique educational opportunity to devote their full time to studying the Appalachian region—its strengths, its problems and its challenges. The program's objectives are to promote in-depth awareness and understanding of life in Appalachia from an interdisciplinary approach and to provide an academic setting for understanding and participating in the dynamics of life in the area. This comprehensive academic program, which includes both classroom and field experience, provides 15 semester hours of credit in a variety of disciplines and offers the student the opportunity to become actively involved in a unique part of American society.

The following courses comprise the Appalachian Semester. These courses are open only to students participating in the Appalachian Semester.

Sociology 345. Appalachian Semester Orientation Seminar. (F)(3)
An introduction to Appalachian culture.

Sociology 349. Economics of Appalachian Poverty. (F)(3)
A theoretical empirical study of the economics of poverty in southern Appalachia with special emphasis on the major economic bases; including an examination of pertinent historical and geographic characteristics.

Sociology 422. Social Institutions in Appalachia. (F)(3)
A theoretical and empirical analysis of the culture and social characteristics of the Appalachian Region from an institutional point of view.

Sociology 287-487. Appalachian Field Practicum. (F)(6)
The Appalachian Semester student, in consultation with the coordinator, will develop a specialized field experience. May be taken in any approved discipline. Project will be designed to enhance the student's learning experience and make a positive contribution to the lives of people living in Appalachia. Numerous projects not requiring private transportation may be developed; if the chosen field experience requires such transportation, the student must provide it.

An introductory knowledge of social studies and permission of the coordinator are prerequisites for enrollment in the program. A course in social work methods or in social research methods is highly recommended as a prerequisite for participants desiring field work credit in social work and sociology respectively.

AREA IN SOCIAL STUDIES EDUCATION—see the Head of the Education Department or the Chair of Social Science.

CAMPUS INFORMATION

Location, Campus and Buildings

Union College is located in Barbourville, a residential town of 3,500, on U.S. highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. Cumberland Gap National Historical Park is thirty miles away. The Doctor Thomas Walker State Shrine is four miles from the campus and in adjoining counties are Cumberland Falls State Park, Levi Jackson State Park, and Pine Mountain State Park.

On one of the most picturesque campuses of the South, Union College is proud of its Georgian buildings. Shaded by overhanging elms, the red brick buildings give the campus a majestic charm of dignity and beauty.

Speed Hall, (Administration Building), 1897-1905. A gift from the estate of Mrs. Fanny Speed of Louisville, Ky. Her bequest also partially financed Centennial Hall and Stevenson Hall.

Centennial Hall, (formerly the Classroom Building), 1907.

Stevenson Hall, Men's Dormitory, 1907; wings added 1957.

Dramatic Arts Center, (formerly Soldiers' and Sailors' Memorial Gymnasium), 1919; remodeled 1965.

Baldwin Place, the home of the President, 1925. The gift of Mr. and Mrs. F.E. Baldwin, Elmira, N.Y.

Maintenance Building, 1938, originally equipped by a gift from the estate of Robert Norton, New Albany, Indiana.

Abigail E. Weeks Memorial Library, 1941, originally furnished by a gift from Mrs. Abbie E. Stewart.

Pfeiffer Hall, Women's Dormitory, 1942; wing added 1960. The original wing was a gift from the estate of Mr. and Mrs. Henry Pfeiffer, of New York City.

Conway Boatman Chapel and Fine Arts Building, 1949.

College Courts, residences for married students, 1954; expanded in 1964.

College Park Drive, 1960, faculty residential area.

Langford Apartments, 1962. Gifts from the estates of Miss Mary Kyle Dugan and Mrs. Mary Gilbert Langford in memory of Mr. and Mrs. George Langford. Housing for faculty and staff.

Religious Life Center, 1975.

Physical Education Building, 1964, including the Swimming Pool, 1957.

Student Center, 1964.

Mahlon Miller Science Center, 1973.

Publications

Union College Bulletin—An official quarterly bulletin, one issue of which is the catalog number. The bulletin is sent free on request.

Parent's Bulletin—A publication to inform parents of activities on campus.

Union Express—A newspaper published by the student body.

Union College Alumus—A bulletin published by the Alumni office.

Stespean—The yearbook, published annually by the students of the college.

Union and You—A publication that combines the offical calendar and institutional policies.

Pfeiffer Perspective—A handbook for residents of Pfeiffer Hall.

Stevenson Scenario—A handbook for residents of Stevenson Hall.

Student Organizations

Students have the opportunity of participating in and developing leadership through a number of campus organizations. Some of these are departmental, some are limited to honor students in their fields,many are open to all interested students. Each has a faculty sponsor and some include faculty in their membership. The following are official clubs and organizations as approved by the faculty of Union College.

Alpha Psi Omega—A national honorary theatre fraternity. Union's Zeta Chi chapter serves to encourage participation in the college's theatrical activities and to develop larger and better informed theatre audiences.

Appalachian Wilderness Club—A group to explore the outdoors through hiking, camping, and caving.

Association of Women Students—An organization to enable residents to participate in decisions involving dorm life.

Beta Chi Alpha—A cultural society, in the form of a sorority, which attempts to bring beauty, culture, and art to the campus.

Circle-K International—A service fraternity associated with Kiwanis.

Fellowship of Christian Athletes—An organization designed to promote athletic involvement and spiritual growth.

Gamma Beta Phi—A national honor society promoting scholarship, leadership, and good citizenship at Union College.

Iota Mu Gamma—An organization to benefit the College by promoting services, fellowship and unity.

Iota Sigma Nu—An honor society to provide recognition for honor students by uniting them in an organization which encourages high ideals, promotes diligence in study, and rewards excellence in scholarship.

Modern Culture Study Group—A group whose purpose is to study modern culture with an emphasis on the dramatic arts, through group discussion, films, readings, and lectures.

Mu Omega Beta—A fraternity promoting fellowship, unity, and service to the college community.

Oxford Club—An organization to provide a fellowship of service and study for Christian students of Union College, and to provide opportunities for those students to put their faith into action.

The Paw Pack—An organization to encourage school spirit; increase campus participation in Union athletic events; and create a spirit of unity among students, faculty, administration and staff.

Phi Beta Lambda—A national business organization promoting scholastic achievement, service to the community, development of leadership potential, social interaction, and increased awareness of the business world.

Student Center Board—A board to plan programs for social and recreational activities to supplement those planned by other campus agencies.

Student National Education Association—A national pre-professional organization for men and women planning to pursue teaching as a career.

Union College Science Society—An organization to stimulate interest in the natural sciences.

Union College Service Organization—An organization sponsored by Campus Ministry and supported by The Fellheimer Trust, which encourages and coordinates volunteer service on the campus and in the surrounding communities by students, faculty and staff.

BLTN (Better Later Than Never—An organization seeking to provide information, social outlets, counseling, and emotional support for non-traditional students (those who have experienced a gap between their secondary education and college or an interruption in their college careers).

BBUCL (Book Busters of Union College Library)—An organization seeking to encourage greater use of the Union College Library.

Association for Cultural Enhancement—An organization seeking to promote cooperation, fellowship and solidarity among student groups with a special concern for the needs of minority students on the Union Campus.

Athletics

Union College is a member of the Kentucky Intercollegiate Athletic Conference (KIAC) and of the National Association of Intercollegiate Athletics (NAIA). The College promotes athletics for physical development and as a vital part of the program of extra-curricular activities. The program emphasizes the protection of the best interests of the student athlete. Union teams are noted for "clean" sport and competitive spirit. Sport for fun and character building is fundamental. In intercollegiate competition for men, the College is represented by varsity teams in football, basketball, swimming, tennis, and baseball.

Women may participate on intercollegiate teams in swimming and tennis, and have earned places on varsity teams in these sports in recent years. Separate women's teams are active in basketball and softball and compete

against women's teams from other colleges and universities in the area.

Union College sponsors intramural activities in touch football, basketball, free-throwing, badminton, softball, tennis and volleyball to have a "sports for all" program. The intramural organization is, in general, made up of men's and women's independent teams. The program includes both team and individual sports. No college credit is given for intramurals, but everyone is urged to take part.

Student Conduct

Each student is expected to conduct himself at all times according to the rules of good society. This obligation includes compliance with Federal, State and local laws and adherence to college regulations. As members of a free society, students are always free to peacefully and lawfully petition for amendment or modification of the various laws as well as the college regulations. However, the rights of the student body as a whole and the College as an institution of higher education supersede the rights of any individual student or any group of students. Accordingly, not in an attempt to stifle dissent, but rather to perpetuate an environment where the student may peacefully pursue his studies, actions which are disruptive to the normal functions and operations of the College will not be tolerated. Students who are disorderly in conduct, or unmindful of the rights of others, may be required to withdraw from the College.

No student shall possess or use alcoholic beverages when on college property or when away from the campus representing the College in any way; i.e., as a participant or spectator at a College athletic event or other college function. Any student violating this regulation may be required to withdraw from the College.

Union College students are obliged to show discretion, good judgment, and strong respect for Christian principle in all interpersonal relationships.

The sale, possession, or use of drugs or substances in violaton of the Federal, State, or local laws is prohibited. Any student who illegally sells, possesses, or uses such drugs will be subject to criminal prosecution by the appropriate law enforcement agencies and also may be suspended or expelled. It is the announced policy of Union College to cooperate fully with the various law enforcement officials in the enforcement of the drug laws as with all other laws. A student's lawful use and possession of certain drugs prescribed by a qualified medical practitioner such as a physician, dentist, or optometrist is, of course, permitted.

Firearms and explosives of any kind are forbidden in the residence halls or on the campus. Students may be expelled for failure to abide by this rule.

Gambling in any form is strictly forbidden.

Union College expects good housekeeping from all on-campus resident students. Residents who fail to keep their rooms in satisfactory condition will have their housing contract revoked. The College reserves the right to enter and inspect the rooms of students at any time.

The Student Code defining procedures for dealing with academic dishonesty can be obtained in the office of the Vice President for Academic Affairs.

Social Life

Students are encouraged to accept every legitimate opportunity to engage in social functions. The faculty emphasizes the value of well-directed social activities. Student organizations, the faculty, and local churches make desirable contributions to the promotion of social life. The Dean of Students is responsible for the initiation and direction of a comprehensive program of student social and recreational activities. All social functions are subject to the rules and regulations of the College.

Automobiles

Automobiles parked on campus must be registered in the Business Office. All must display a legible parking permit sticker. The annual registration fee is $5.00. Stickers should be displayed on the rear bumper of the car on the driver's side. Cars should be parked in the assigned lots as designated by the Traffic Control Officer. Violation of parking regulations may result in vehicles being ticketed or towed away at owner's expense. Parking for the handicapped is provided.

Health Service

Union College students receive health service and advice from the County Health Office in Barbourville. Since the College does not have facilities for taking care of protracted illness, arrangements for hospitalization must be made by the student or his parents. When a physician is needed, the student may request the dormitory counselor to call one, whose fee is paid by the student. In case of emergency, the College reserves the right to employ a physician or to have a student hospitalized without consent of the parents. All full-time students are encouraged to secure coverage of an accident, sickness, and hospitalization plan if adequate insurance is not available through a family plan at home. All claims under student insurance plans are filed by the student and the attending physician and not by Union College.

The College does require that a sutdents health service record be completed by a physician and placed on file with the College.

Campus Housing

Stevenson Hall for men and Pfeiffer Hall for women permit single or double room occupancy. Twenty apartments are available for married students. All residents of Stevenson Hall, Pfeiffer Hall, and College Courts are required to sign housing contracts. Residents in the residence halls are required to purchase meal tickets for the college cafeteria.

Students are expected to obey the terms of their housing contract. A copy of this contract can be obtained in the office of the Dean of Students.

The residence halls are closed during vacation periods as specified in the academic calendar. Students will not be allowed to remain in the residence halls during vacation. Students will be required to turn in their keys during these stated vacation periods. Anyone failing to do so will be charged a lost key fee. The Dean of Students assists students who must remain in Barbourville for full-time work-study or student teaching in finding suitable housing.

No student will be issued a room key, hallway, or outside door key unless he or she has previously signed a housing contract. Keys must be returned by the last day of the terms of this agreement or of the student's use of the accommodations, whichever occurs first. Any student failing to return a room key and/or apartment key will be charged a ten dollar ($10.00) fee. A twenty-five dollar ($25.00) fee will be charged for loss of hallway or outside door key to cover the cost of changing the lock for the security of persons subsequently permitted the use of the accommodations.

All students twenty-one years or older, juniors or seniors, according to the Registrar's Office records, veterans, and married students are eligible to live off campus. Juniors and seniors under age twenty-one must have parental permission.

Religious Life

Union College takes seriously its identity as a church-related institution and is concerned that its students be made aware of the value of vital faith as well as academic excellence. We seek to be faithful to John Wesley's affirmation that a whole person is one who unites knowledge with vital piety.

Chapel worship services are held on campus twice weekly, are ecumenical in nature, and utilize the gifts and graces of the campus minister, other clergy, faculty, and students. Students are given many opportunities to participate in vesper services, prayer groups, Bible studies, and other informal discussion groups and are given ample opportunity and encouragement to grow in their understanding of the Christian faith. Celebrations of the Lord's Supper are held frequently. The Religious Life Center, in the heart of the campus, provides a setting for informal worship, study, discussion, and fellowship.

The campus minister and other community clergy are available for personal Christian counseling.

The Willson-Gross Lectures and the Staley Distinguished Christian Scholar Lectures seek to bring outstanding speakers to the campus to discuss and provide information about the Christian faith. The Religious Life Committee, composed of students, faculty, and local clergy, works with the campus minister as an advisory group to ensure that religious life programs are appropriate to the needs of the students and the campus community.

Students are encouraged to worship regularly in the church of their choice and to participate in the various denominational and faith-oriented groups on campus and in the community.

ACADEMIC CALENDAR 1986-87

Summer, 1986 - First Session

June 1, Sunday	Residence Halls open for new students at 1:00 p.m. First meal at 4:30 p.m.
June 2, Monday	Advising and Registration. Late fee after this date. Students may register for both summer sessions. Classes begin on abbreviated schedule.
June 6, Friday	Last day for schedule changes. Last day to register for first summer session.
June 18, Wednesday	Last day to elect credit/fail option.
June 23, Monday	Orientation and Advance Registration for fall semester for new students.
July 2, Wednesday	Final Examinations for first summer session.

Summer, 1986 - Second Session

July 3, Thursday	Advising and Registration. Late fee after this date.
July 4, Friday	Independence Day holiday. Residence Halls remain open; food service available.
July 7, Monday	Classes begin on regular schedule.
July 18, Friday	Last day for schedule changes. Last day to register for second summer session.
July 23, Wednesday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W".
August 4, Monday	Orientation and Advance Registration for fall semester for new students.
August 5-6	Advance Registration for fall semester.
August 8, Friday	Final Examinations for second summer session.
August 9, Saturday	Last meal at noon. Dormitories close at 4:00 p.m.

Fall Semester, 1986

August 19, Tuesday	****Last day to finalize advance registration for fall semester.**
August 27, Wednesday	Meeting for new faculty members; 2:00 p.m.
August 28, Thursday	Faculty meeting/workshop; 9:00 a.m.
August 29, Friday	All-faculty, pre-registration conference; 9:00 a.m. Divisions meet at 1:30 p.m.
September 2, Tuesday	Dormitories open at 8:00 a.m. First meal at noon. Advising for upperclassmen and freshmen having completed Placement Tests and Summer Orientation; 9:00 a.m. Students who have not completed Placement Tests and/or Summer Orientation follow schedule below: Fall Orientation -10:30 and 3:00 p.m. — Placement Tests - 1:00 p.m.
September 3, Wednesday	Registration for Fall Semester. Late fee after this date.
September 4, Thursday	Classes begin.
September 8-12	Constitutes the first week for refund purposes.
September 11, Thursday	Last day for schedule changes. Last day to register for fall semester.
October 8, Wednesday	Founders' Convocation
October 29-30	Mid-semester Examinations (classes meet on regular schedule).
October 31-November 2	Mid-semester weekend; no classes. Residence Halls remain open; food service available.
November 3, Monday	Classes resume.
November 5-14	Counseling sessions with advisors. Classes meet on regular schedule.
November 17, Monday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W".
November 25, Tuesday	Last meal served at 4:30 p.m.
November 26, Wednesday	Dormitories close at 10:00 a.m.
November 26-30	Thanksgiving vacation; no classes.

November 30, Sunday	Dormitories re-open at 1:00 p.m. First meal at 4:30 p.m.
December 1, Monday	Classes resume
December 3-12	Advising and Advance Registration for spring semester.
December 13, Saturday	Final Examinations for Saturday classes.
December 15, Monday	Reading Day; no classes (preparation for final exams).
December 16, 17 & 18	Final Examinations.
December 19, Friday	****Last day to finalize advance registration for spring semester.** Final grades for fall semester are due. Last meal at noon. Residence Halls close at 4:00 p.m.

Spring Semester, 1987

January 4, Sunday	Residence Halls open at 1:00 p.m. First meal at 4:30 p.m.
January 5, Monday	Academic Advising. Counseling and Orientation for new students.
January 6, Tuesday	Registration for spring semester. Late fee after this date.
January 7, Wednesday	Classes begin.
January 12-16	Constitutes the first week for refund purposes.
January 14, Wednesday	Last day for schedule changes. Last day to register for spring semester. Last day to apply for May graduation.
March 4-5	Mid-semester Examinations (classes meet on regular schedule).
March 6, Friday	Spring vacation begins; no classes. Last meal at noon. Residence Halls close at 4:00 p.m.
March 15, Sunday	Residence Halls re-open at 1:00 p.m. First meal at 4:30 p.m.
March 16, Monday	Classes resume.
March 18-19	Counseling sessions with advisors. Classes meet on regular schedule.
April 10, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W".
April 17-20	Easter vacation; no classes. Residence Halls remain open; food service available.
April 21, Tuesday	Classes resume.
April 21-May 1	Advising and Advance Registration for May Interim, Summer Sessions and Fall Semester.
April 15, Wednesday	Honors Convocation.
May 2, Saturday	Placement tests for new summer session students.
May 4, Monday	****Last day to finalize advance registration for May Interim.** Reading Day; no classes (preparation for final exams).
May 5, 6 & 7	Final Examinations.
May 8, Friday	Final grades for spring semester are due.
May 9, Saturday	Commencement; 2:30 p.m.

May Interim, 1987

May 11, Monday	Registratin for May Interim. Classes begin. Late fee after this date.
May 12, Tuesday	Last day for schedule changes.
May 15, Friday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W".
May 29, Friday	Final Examinations.

Summer, 1987 - First Session

May 31, Sunday	Residence Halls open for new students at 1:00 p.m. First meal at 4:30 p.m.

June 1, Monday	Advising and Registration. Late fee after this date. Students may register for both summer sessions. Classes begin on abbreviated schedule.
June 5, Friday	Last day for schedule changes. Last day to register for first summer session.
June 24, Wednesday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W".
June 29, Monday	Orientation and Advance Registration for fall semester for new students.
July 3, Friday	Final Examinations for first summer session. Advance Registration for second summer session.

Summer, 1987 - Second Session

July 6, Monday	Advising and Registration. Late fee after this date. Classes begin on regular schedule.
July 10, Friday	Last day for schedule changes. Last day to register for second summer session.
July 22, Wednesday	Last day to elect credit/fail option. Last day to withdraw from a course with a grade of "W".
August 3, Monday	Orientation and Advance Registraton for fall semester for new students.
August 7, Friday	Final Examinations for second summer session.
August 8, Saturday	Last meal at noon. Dormitories close at 4:00 p.m.

**Students who register during advance registration and do not make financial arrangements by date indicated will have to repeat registration during the regular registration period.

ADMINISTRATION AND STAFF

JACK C. PHILLIPS, *President of the College* — A.B., Birmingham Southern College; M.Div., Vanderbilt University; LL.D., Union College.

MAHLON A. MILLER, *President Emeritus* — B.S., University of Pittsburgh; M.Div., S.T.M., Drew Theological Seminary; Case Institute of Technology; Western Reserve University; Union Theological Seminary; Zurich University; Tuebingen University; D.D., Union College; L.L.D., Morehead State University.

Administrative Affairs

EDWARD H. BLACK, *Vice President for Administration; Affirmative Action Officer* — B.A., M.A. in Education, Union College.

GEORGE T. BLACK, *Director of Data Processing* — B.S., Union College.

JACK T. KARR, *Junior Programmer* — A.A., B.S., Union College; Sue Bennett College.

LOUISE MARTIN, *Computer Operator; Data Entry Supervisor* — LaCrosse State Teachers College; Union College.

MARSHALL B. POTTER, *Superintendent of Buildings and Grounds.*

EUGENE BRANSTUTTER, *Assistant Superintendent of Buildings and Grounds.*

Academic Affairs

B. CARLYLE RAMSEY, *Vice President for Academic Affairs* — A.A., Miami Dade Community College; B.A., University of Florida; M.S., Ph.D., Florida State University.

H. WARREN ROBBINS, *Dean of Graduate Academic Affairs* — B.S., Eastern Kentucky University; M.A., George Peabody College; Indiana University; University of Kentucky; Ed.D., University of Tennessee.

E. EDWIN LeMASTER, *Registrar* — B.A., Asbury College; B.D., Asbury Theological Seminary; M.A., Butler University.

VIRGINIA B. SADDLER, *Head Librarian* — B.A., Cornell College; B.S. in Library Science, M.S., University of Illinois.

BARBARA A. WAINDLE, *Assistant Librarian* — B.A., Lakeland College; M.A.L.S., University of Wisconsin; Sp.L.I.S., Indiana University.

FAYE FRANCE, *Circulation Supervisor in the Library* — Union College.

JANET TARRY, *Director of Special Programs* — B.A., University of Louisville; M.A., Murray State University.

JANE ROBBINS, *Assistant Director of Upward Bound* — B.S., M.A. in Education, Union College.

HOWARD MAYFIELD, JR., *Upward Bound Tutor/Counselor* — B.S., West Virgina State College; Marshall University; Union College.

CONNIE R. MAYFIELD, *Director of Placement and Career Counselor* — B.A., Oklahoma Baptist University; M.S., University of Kentucky.

JOHN H. McGRIFF, *Director of Continuing and Public Service Education* — B.S., M.A., Ph.D., Ohio State University.

ROBERT W. SWANSON, *Director of Institutional Research* — B.S., Purdue University; M.S., Indiana University Northwest; Ed.D., Indiana University.

Student Affairs

FRANCES L. PATRIDGE, *Vice President for Student Affairs* — B.S., University of Arkansas; M.A., George Peabody College; University of Southern California; Indiana University; L.H.D., Union College.

JERRY L. CORNWELL, *Director of Admissions* — A.A., Monroe Community College; State University of New York; Union College.

SUSAN M. ROWLETTE, *Admissions Counselor* — A.B., M.A., Morehead State University.

PAUL A. DAMERON, *Admissions Counselor* — B.A., Campbellsville College; M.A. in Education, Western Kentucky University.

EDWARD de ROSSET, *Dean of Students and Director of the Student Center* — B.A., Berea College; M.A., Eastern Kentucky University.

FREDA NEW, *Administrative Assistant to the Dean of Students* — Union College.

PATRICIA A. SCHWEITZER, *Director of Pfeiffer Hall* — B.S., M.A., Eastern Kentucky University.

MILES ESTES, *Director of Stevenson Hall* — B.A., Union College.

JAMES H. POWELL, *Campus Minister* — B.A., University of Virginia; M.Div., Vanderbilt University.

DEBRA SMITH, *Director of Financial Aid* — B.S., Union College.

JANE MILLS, *Financial Aid/Work Study Counselor.*

PAUL S. MOORE, *Director of Athletics* — A.B., Union College; M.S., University of Tennessee; Indiana University; University of Oregon; Ed.D., University of Alabama.

LARRY INKSTER, *Assistant Athletic Director*

SCOTT JOLLY, *Assistant Basketball Coach* — B.S., Louisiana Tech University.

JOHN ROSS, *Head Football Coach* — B.S., University of Iowa.

DAVID BANKSTON, *Assistant Football Coach* — B.S., University of Tampa.

GARY BARNETT, *Assistant Football Coach* — B.S., Western Kentucky University.

College Relations and Development

MILTON H. TOWNSEND, *Vice President for College Relations and Development* — B.S., Union College; M.A., University of Kentucky; HH.D., Union College.

MARY WALKER, *Administrative Assistant to the Vice President for College Relations and Development.*

THOMAS J. McFARLAND, *Director of Alumni Affairs* — B.M., Union College; M.M., University of Akron.

JASON LeMAY *Public Information and Alumni Assistant* — B.S., Union College.

Business Affairs

CHERYL BROWN, *Business Manager and Treasurer* — B.S., Union College.

MYRLYN LAWSON, *Assistant Treasurer/ Assistant Business Manager* — B.A., Union College.

DARITA MILLS, *Student Loan Officer* — B.S., Union College.

MARY DELILA MILLER, *Director of Purchasing* — B.S., Union College.

BARBARA A. TEAGUE, *Accounts Receivable Clerk/Cashier.*

THE FACULTY

KENNETH N. ALFORD, *Assistant Professor of Mathematics* — B.A., Texas A & M University; M.S., New Mexico Highlands University.

PAULA J. ALLEN, *Associate Professor of Office Administration* — B.S., Cumberland College; M.A. in Education, Union College; M.A. in Business Education; Eastern Kentucky University.

IVAN G. BUNCH, *Instructor of Coal Technology; Director, Coal Technology Program* — B.S., M.A., Eastern Kentucky University.

CLEVIS D. CARTER, *Assistant Professor of Physical Science* — B.A., Union College; M.A., George Peabody College; University of Tennessee; University of Kentucky; Ohio State University.

TAMRA L. CASH, *Instructor of Health and Physical Education; Head Women's Basketball and Softball Coach* — B.S., Elon College; M.S. University of Tennessee.

SANTARAM CHILUKURI, *Professor of Physics; Chairman, Division of Natural Sciences* — B.S., M.S., Ph.D., Andhra University, India; SUNY at Buffalo; Yale University.

MARTHA L. CORNWELL, *Assistant Professor of Sociology* — B.A.,SUNY at Geneseo; M.A., SUC at Buffalo

L. JAMES COX, *Associate Professor of Social Work; Coordinator, Appalachian Semester* — B.A., Cumberland College; M.S.S.W., Kent School of Social Work, University of Louisville.

ALLEN D. ENGLE, *Assistant Professor of Business Administration* — B.B.A., M.B.A., Eastern Kentucky University.

DIANNE R. FERRIS, *Professor of English; Chairman, Division of Humanities* — B.A., University of Minnesota; M.A., Ph.D., University of Washington.

JAN M. FINKEL, *Professor of English; Head, Department of English and Foreign Languages* — A.B., Wittenberg University; M.A., Ph.D., Indiana University.

MARY ANN GHOSAL, *Assistant Professor of Mathematics* — B.A., B.S., Missouri Valley College; M.S.T., Illinois Institute of Technology; Ed.S., University of Kentucky.

ALLAN E. GREEN, *Associate Professor of Music* — B.M., Western Michigan University; M.M., Indiana University.

JOE C. HACKER, *Assistant Professor of Business* — B.S., Union College; M.A., Eastern Kentucky University; University of Georgia; University of Tennessee.

ELLA KAY HENSLEY, *Assistant Professor of Economics* — B.A., M.A., M.A.M.R.D., Ph.D., University of Florida; North Carolina State University; Cornell University.

LARRY INKSTER, *Associate Professor of Health and Physical Education; Assistant Dirctor of Athletics; Head Baseball Coach* — B.S., M.A., in Education, Union College; M.S., Eastern Kentucky University; University of Kentucky.

A. JAMES KERLEY, *Associate Professor of Education; Head, Department of Education* — B.S., Tennessee Technological University; M.A., The Citadel; Ph.D., Florida State University.

NAZIR A. KHATRI, *Assistant Professor of Chemistry* — B.Sc., M.Sc., University of Karachi; Ph.D., University of Nebraska.

MARY ALICE LAY, *Assistant Professor of Education* — B.S., M.S., University of Kentucky; University of North Dakota; Indiana State University.

JEAN LETCH, *Associate Professor of Education* — B.A., Iowa State Teachers College; M.A., Ed.S., University of Northern Iowa; Ph.D., University of Iowa.

W. GORDON MARIGOLD, *Professor of Languages* — B.A., University of Toronto; M.A., Ohio State University; University of Munich; Ph.D., University of Toronto.

SCOTT D. MARTIN, *Instructor of Business* — B.S., Union College; University of Kentucky.

ROBERT D. MATTHEWS, *Francis Landrum Memorial Professor of Religion; Head, Department of Religion and Philosophy* — B.A., Wheaton College; S.T.B., Ph.D., Boston University; Clark University.

CONNIE R. MAYFIELD, *Instructor of General Studies* — B.A., Oklahoma Baptist University; M.S., University of Kentucky.

DERIL K. MAYS, *Professor of Psychology* — B.S., Union College; M.A., University of Kentucky; Ed.D., University of Tennessee.

THOMAS J. McFARLAND, *Assistant Professor of Music* — B.M. Union College; M.M., University of Akron.

JOHN H. McGRIFF, *Assistant Professor of Political Science* — B.S., M.A., Ph.D., Ohio State University.

TERESA A. METCALFE, *Instructor of Health and Physical Education; Athletic Trainer* — B.S., M.S., Ithaca College.

TODD A. METCALFE, *Instructor of Physical Education; Swimming Coach; Assistant Football Coach* — B.S., Ithaca College; M.A., Western Kentucky University.

PAUL S. MOORE, *Professor of Health and Physical Education; Chairman, Division of Applied Science; Head, Department of Health and Physical Education* — A.B., Union College; M.S., University of Tennessee; Indiana University; University of Oregon; Ed.D., University of Alabama.

WILLIAM H. MYERS III, *Assistant Professor of Computer Information Systems; Director, Computer Information Systems Program* — B.S., Purdue University; M.A., University of Colorado; M.S. University of Evansville.

FRANCIS E. NUSSBAUM, JR., *Professor of Biology* — B.S., Ohio University ; Ph.D., Michigan State University.

FRANCES PATRIDGE, *Associate Professor of Health and Physical Education* — B.S., University of Arkansas; M.A., George Peabody College; University of Southern California; Indiana University; L.H.D., Union College.

BILL PETERSON, *Instructor of Health and Physical Education; Head Basketball Coach* — A.A., St. Petersburg Junior College; B.A., Eckerd College; M.S., Louisiana Tech University.

REBECCA A. PETTYS, *Assistant Professor of Drama and Speech* — B.A., Berea College; M.A. Northwestern University; Ph.D., Indiana University.

ROBERT V. PETTYS, *Assistant Professor of Business* — B.A., M.A., Michigan State University; M.B.A., Ed.D., Indiana University.

JAMES H. POWELL, *Instructor of Religion* — B.A., University of Virginia; M.Div., Vanderbilt University.

B. CARLYLE RAMSEY, *Professor of History* — A.A., Miami Dade Community College; B.A., University of Florida; M.S., Ph.D., Florida State University.

H. WARREN ROBBINS, *Professor of Education* — B.S., Eastern Kentucky University; M.A. George Peabody College; Indiana

University; University of Kentucky; Ed.D., University of Tennessee.

RONALD B. ROSEN, *Assistant Professor of Biology* — B.A., Hendrix College; M.S. Colorado State University; Ph.D., University of Manitoba.

C. RONALD ROSENSTIEL, *Assistant Professor of Sociology* — B.A., M.S., M.A., Ph.D., University of Kentucky.

VIRGINIA B. SADDLER, *Associate Professor of Library Science* — B.A., Cornell College; B.S. in Library Science, M.S., University of Illinois.

PATRICIA A. SCHWEITZER, *Instructor of English* — B.S., M.A., Eastern Kentucky University.

RANDALL C. SHEETS, *Assistant Professor of Music* — B.M., Birmingham Southern College; M.M., University of Illinois.

VERA LYNN SHEETS, *Assistant Professor of Reading; Reading Specialist* — B.A., Converse College; M.A., University of Illinois.

PAUL J. STEPHENSON, *Assistant Professor of Accounting* — B.S., M.A., Brigham Young University; C.P.A.

BETTY S. STROUD, *Associate Professor of Music; Head, Department of Music and Fine Arts* — B.S., Northeast Louisiana State University; M.M., Louisiana State University; Ed.D., University of Illinois.

ROBERT W. SWANSON, *Associate Professor of Environmental Studies* — B.S., Purdue University; M.S., Indiana University Northwest; Ed.D., Indiana University.

JOHN C. TAYLOR, *Associate Professor of History; Chairman, Division of Social Science* — B.A., Juniata College; J.D., Duke University; M.A., Ph.D., Pennsylvania State University.

DORIS B. THOMPSON, *Assistant Professor of Education* — B.S., Livingston University; M.A., Ph.D., University of Alabama; East Carolina University.

BARBARA A. WAINDLE, *Assistant Professor of Library Science* — B.A., Lakeland College; M.A.L.S., University of Wisconsin; Sp.L.I.S., Indiana University.

ANDELYS WOOD, *Professor of English* — A.B., Middlebury College; Ph.D., Indiana University.

LESTER G. WOODY, *Professor of English* — B.A., University of Virginia; M.A., University of Richmond; Ph.D., University of North Carolina.

ADJUNCT FACULTY

PATRICK N. ANGEL, *Instructor of Coal Technology* — A.A., Alice Lloyd College; A.A., Forestry and Wood Technical School, University of Kentucky; B.S., M.S., Stephen F. Austin State University.

JOHN E. BABB III, *Instructor of Coal Technology* — B.S., Eastern Kentucky University; Class I Certification, Kentucky Department for Natural Resources and Environmental Protection; MSHA Certificaton, State of Kentucky.

CELINA O. BETANCOURT, *Instructor of Spanish* — B.S., Universidad Pedagogica Nacional - Bogota; M.A. in Education, Union College.

ANN MARIE BINGHAM, *Instructor of Music* — B.S., University of Tennessee; M.M., Eastern Kentucky University.

KARIN B. BROWN, *Instructor of German* — B.A., Murray State University; M.A., Lincoln Memorial University.

LINDA G. DAVIES, *Instructor of Business* — B.S., Union College; Certified American Institute of Insurance; Certified Insurance Institute.

SAMUEL E. DAVIES, P.S.C., *Instructor of Business* — B.S., Union College; J.D., University of Kentucky, College of Law.

CONNIE D. HAUSER, *Instructor of Physical Therapy* — B.S., University of Kentucky.

FRANCES C. HOSLER, *Instructor of French* — B.A., M.A., University of Kentucky; Central Wyoming College; University of Tennessee.

DIANNE KAGIN, *Instructor of Art* — B.S., Cumberland College; M.A. in Education, Eastern Kentucky University.

DONNA KERLEY, *Instructor of Psychology* — B.S., Bridgewater State College; M.A.,Tennessee Technological University.

EVELYN C. MATTHEWS, *Instructor of Art* — B.S., M.A. in Education, Union College.

TENA E. MESSER, *Instructor of English* — A.A., Gendale College; B.A., University of California; M.A. in Education, Union College.

CHARLES R. MITCHELL, *Instructor of Humanities* — B.A., Union College; M.A., Indiana University.

WALTER W. OWENS, *Instructor of Coal Technology* — Surface Mine Foreman License, Licensed Blaster, States of Kentucky and Tennessee; Certified Seismologist, State of Texas.

GARY D. PARKER, *Instructor of Philosophy* — B.A., Cumberland College; M.R.E., Southern Baptist Seminary; University of Tennessee.

MARIAN LYNNE ROBINSON, *Instructor of Music* — B.M., Furman University; M.C.M., The Southern Baptist Theological Seminary.

CATHY SMITH, C.P.A., *Instructor of Accounting* — B.S., Campbellsville College, University of Alabama.

CARRIE C. STEPHENSON, *Instructor of English* — B.A., M.A. Brigham Young University.

GERALD W. YAHNE, *Instructor of Coal Technology* — B.S., M.S., University of Cincinnati; Certified Professional Geologist, State of Indiana.

JOHN YATROS, *Associate Professor of Psychology — B.S., Concord College; M.A., West Virginia University; Ed.D., Indiana University.*

FACULTY EMERITI

ERWIN S. BRADLEY, *Professor Emeritus of History and Political Science* — B.S. in Education, Juniata College; M.A., University of Michigan; Ph.D., Pennsylvania State University.

FRANK A. GILBERT, *Professor Emeritus of Biology* — B.S., University of Massachusetts; M.A., Ph.D., Harvard University.

FRANK E. MERCHANT, *Professor Emeritus of English* — A.B., M.A., Brown University; Ph.D.,University of Denver.

RENA MILLIKEN, *Professor Emeritus of Business* — A.B., Western Kentucky University; M.A., George Peabody College; Indiana University; Case Institute of Technology.

KATHLEEN MOORE, *Associate Professor Emeritus of Elementary Education* — A.B., Mississippi State College for Women; M.A., Teachers College, Columbia University; Ohio State University; University of Southern California.

WILLIAM SHERMAN OXENDINE, *Associate Professor Emeritus of History* — A.B., Union College; M.A., University of Kentucky; University of North Carolina; University of Arkansas.

MARY PETTUS, *Associate Professor Emeritus of Mathematics* — A.B., Georgetown College; M.A. University of Chigago.

CHARLES W. SIMMS, *Professor Emeritus of Education* — B.S., Millsaps College; M.A. Ph.D., George Peabody College.

BOARD OF TRUSTEES

OFFICERS OF THE BOARD

Douglas L. Blair, LL.D.
Chairman
Erland P. Stevens, Jr., LL.D.
Vice Chairman
Barbara Perry
Secretary

EX OFFICIO MEMBERS

Bishop Paul A. Duffey, L.H.D.
Louisville, KY
Jack C. Phillips, LL.D.
Barbourville, KY
Cheryl A. Brown, B.S.
Barbourville, KY

TRUSTEES EMERITI

Robert L. Anderson, D.D.
Cynthiana, KY
Eugene C. Cawood
Harlan, KY
Thomas A. Eastes, D.C.S.
Louisville, KY
R. Walton Gardner, D.D.
Lexington, KY
Leo A. Geiss, D.C.S.
St. Charles, IL
L. D. Sweazy, LL.D.
Versailles, KY

AT-LARGE MEMBERS

Craig D. Burrell, M.D.
New York, NY
Ronnie D. Callihan
Flat Lick, KY
Ronald N. Collier, M.D.
Louisville, KY
Samuel E. Davies, J.D.
Barbourville, KY
J. Stanley Faulkner, M.D.
Bellevue, KY
Thomas H. Jenkins, Sc.D.
Houston, TX
Donald B. Kurfees
Louisville, KY
Barbara Perry
West Liberty, KY
Homer Rice, Ph.D.
Atlanta, GA
Fred R. Stevens, LL.D.
Winter Haven, FL
William W. Triplett
D. Commerce
Tucson, AZ
Alan B. Wagner, Ph.D.
Lexington, KY
C. Noel White, D.Min.
Clayton, OH

ALUMNI MEMBERS

Jerry W. Carey
Barbourville, KY
Mary Pauline Fox, M.D.
Pikeville, KY
Jean Owens Knuckles
Barbourville, KY

KENTUCKY CONFERENCE

John C. Anggelis, Esq.
Lexington, KY
Douglas L. Blair, LL.D.
Barbourville, KY
Margaret E. Bowling, A.B.
Hazard, KY
R. L. Brown, Jr.
Williamsburg, KY
Edward L. Cawood, LL.D.
Harlan, KY
Donald W. Durham, D.D.
Versailles, KY
Raymond W. Gibson, Jr., D.D.
Lexington, KY
Harold E. Henson, D.D.
LaGrange, KY
Charles M. Law
Millersburg, KY
James Murphy, M.S.
Corbin, KY
Elbert W. Ockerman, Ed.D.
Washington, D.C.
Erland P. Stevens, Jr., LL.D.
Ashland, KY
Harold W. Tatman, Jr., D.Div.
Maysville, KY
Benny J. Wilson, D.M.D.
Barbourville, KY
Cecil H. Wilson, LL.D.
Barbourville, KY
Sewell Woodward, Jr., D.Min.
Lexington, KY

LOUISVILLE CONFERENCE

W. Arvil Allen, D.D.
Louisville KY
John C. Brinson, D.D.
Louisville, KY
Smith D. Broadbent, Jr.
Cadiz, KY
Charles R. Brown, LL.D.
Henderson, KY
Billy J. Cox, D.D.
Louisville, KY
Sarah G. Ewing, M.S.S.W.
Louisville, KY
Wendell E. Hurt
Louisville, KY
Douglas N. McDowell
Providence, KY
James E. Parker, Jr., M.D.
Louisville, KY
Paul Shepherd, D.D.
Bowling Green, KY
Samuel G. Swope, D.C.S.
Louisville, KY

ASSOCIATE TRUSTEES

Douglas Anderson, B.S.
LaGrange, KY
William H. Ball, Jr.
Herndon, VA
Jeff H. Burton
Corbin, KY
H. H. Greene, L.H.D.
Lexington, KY
Lowell Langefeld, D.Min.
Corbin, KY
Roy L. Pulliam, Jr.
Hazard, KY
John M. Robsion, Jr., LL.D.
Ft. Lauderdale, FL
Claudia Sanders, LL.D
Shelbyville, KY
Robert E. Viall
Barbourville, KY

FACULTY TRUSTEE

Mary Alice Lay, M.S.
Barbourville, KY

INDEX

Academic Advising 31
Academic Amnesty 28
Academic Calendar 26, 94
Academic Scholarships 15
Academic Services 31
Accounting, Courses in 43
Administration and Staff 97
Admission(s)
  Adults Over 25 8
  Advanced Placement 7
  GED Acceptance 7
  of Foreign Students 8
  Procedure 7
  Requirements, undergraduate 7
  to Student Teaching, Requirements 48
  to Teacher Education Program, Requirements 47
Adult Education 32
Advanced Placement 7
Advanced Standing and Transfer 8
Anthropology, Courses in 83
Appalachian Semester 36, 87
Appalachian Studies 35, 87
Applied Music, Courses in 68
Applied Science, Division of 39
Army ROTC 55
Art, Courses in 62
Assistantships 14
Associate Degree Programs 41, 42, 50
Athletics 91
Attendance Regulations 26
Automobiles 92
Awards 22, 23, 24

Behavioral Sciences, Courses in 83
Biology, Courses in 75, 76
Board of Trustees 102
Buildings 90
Business, Degree Programs in 39, 40, 41, 42
Business, Department of 39
Business Administration ,Courses in 43, 44
Business and Music 40
Business Education, Courses in 44

Calendar for the College Year (1986-87) 94
Campus Housing 93
Career Planning, Academic Advising, and Placement 31
Challenge Examinations 28
Chemistry, Courses in 76, 77
Christian Education 71
Church Music, Courses in 68, 69
Class Attendance 26
Classification of Students 7
Coal Mining Technology, Degree Programs in 80, 81
Coal Technology, Courses in 82
College Expenses 12
College-Level Examination Program (CLEP) 28
Combined Degrees 30
Computer Information Systems, Courses in 44, 45
Continuing Education 32
Cooperative Nursing Program 35
Correspondence Credit 29
Course Numbering System 26

Credit by Examination 28
Credit/Fail System 27
Curricula:
  Division of Applied Science 39
  Division of Humanities 57
  Division of Natural Sciences 74
  Division of Social Sciences 83

Degrees:
  Bachelor of Arts, Requirements for Graduation 57
  Bachelor of Music, Requirements for Graduation 64
  Bachelor of Science, Requirements for Graduation 39
  Combined 30
  Table of 34
  with Distinction 30
Developmental Studies Program 31
Diploma in Office Administration 42
Drama and Speech, Courses in 62

Early Start Summer Program 8
Economics, Courses in 45, 46
Education:
  Courses in 52, 53
  Curricula in 48, 49
  Degree programs in 34
  Department of 47
  Graduate Program in 35
  Vocational 50
Employee Scholarships 14
Employment:
  Work-Grant 13
  Work-Study 13
Endowments 21
English, Courses in 58, 59, 60
English and Foreign Languages, Department of 57
Engineering, Combined Degree in 74
Ensembles (Music) 69
Entrance Tests (SAT, ACT) 7
Environmental Studies 36
Environmental Studies, Courses in 77
Examinations and Reports of Marks 27
Expenses:
  Graduate 10
  May Interim Term 10
  Other 10
  Summer Session 10
  Undergraduate 10
Experiential Education 28
Extension and Correspondence 29

Faculty 98
Faculty, Adjunct 100
Faculty Emeritus 101
Fees 10
Financial Assistance 12
French, Courses in 61

GED Acceptance 7
General Information 5
General Science, Courses in 77, 78
Geography, Courses in 87
German, Courses in 61, 62
Graduate Program in Education 35
Graduation Requirements 29
Grade Appeals 28
Grants:
  Kentucky Tuition 13

Pell 13
Supplemental Education Opportunity (SEOG) 13
Work 13

Health, Courses in 53, 54
Health and Physical Education, Department of 53
Health Certificate 8
Health Sciences, Combined Degree in 74
Health Service 93
High-School-Special Program 7
Historical Sketch of Union College 2
History, Courses in 85
Honor Students 28
Housing 93
Humanities, Courses in 57
Humanities, Division of 57

Individualized Major 30
Intramurals 92

Journalism, Courses in 60, 61
Junior College Scholarships 15

Kentucky Tuition Grant 13
KHEAA Guaranteed Student Loan Program 13

Liberal Education Core 37, 38
Library and Learning Resource Center 32
Loans 13, 14
Loan-Grants 14
Location of Campus and Buildings 90

Majors and Degree Programs (Table) 34
Map of Campus ..... inside back cover
Marking System 27
Mathematics, Courses in 78, 79
May Interim Term 10
May Interim Term Expenses 10
Medical Technology, Degree in 74
Micro-Computer Lab 31
Middle School Program 50
Military Science, Courses in 56
Mining Management 81
Mission Statement (Statement of Purpose) 3
Music and Business 67
Music and Fine Arts, Department of 62
Music, Degree Programs in 63
Music Education, Courses in 70
Music History and Appreciation, Courses in 68
Music Theory, Courses in 69

National Direct Student Loan Program 13
Natural Sciences, Division of 74
Nursing, Special Cooperative Program in 35

Oak Ridge Seminars 35
Office Administration, Courses in 46
Office Administration, Diploma in 42

Payment Policy 11
Pell Grants 13
Philosophy, Courses in 72, 73
Physical Education, Courses in 54, 55
Physical Therapist Assistant Program 74
Physics, Courses in 79, 80
Placement Services 31
Planned Curriculum 31
Political Science, Courses in 86

Pre-Professional Programs:
Dentistry 74
Engineering 74
Law 74, 85
Medical Technology 74
Medicine 74
Optometry 74
Pharmacy 74
Physical Therapy 74
Veterinary Medicine 74
Probation 28
Program(s):
Associate Degree (2-year) 41, 42, 51, 81
Career-Oriented 41, 80
College-Level Examination (CLEP) 28
Cooperative Nursing 35
Developmental Studies 31
Early Start 8
Graduate 35
High-School-Special 7
KHEAA Guaranteed Student Loan 13
Majors and Degree (Table) 34
Music and Business 40
National Direct Student Loan 13
Oak Ridge 35
Physical Therapist Assistant 74
Pre-Professional 74
Teacher Education:
Objectives 47
Requirements for Admission to 47
Work-Study 13
Psychology, Courses in 83
Publications 90

Quality Point Standing 27

Refund Information 11
Religion, Courses in 71, 72
Religion and Philosophy, Department of 71
Religious Life 93
Requirement(s):
Admission 7
Admission to Student Teaching 48
Admission to Teacher Education Program 47
Foreign Language 29
General Studies 32
Graduation 29
Reserved Course Numbers 26
Room and Board 10
ROTC (See Army)

Scholarships:
Academic 15
Alumni 15
Employee 14
Junior College 15
Other 15, 16, 17, 18, 19, 20
Science Education Majors 75
Secondary School Transcript 7
Social Sciences, Division of 83
Social Life 92
Sociology, Courses in 84
Spanish, Courses in 62
Special Cooperative Nursing Program 35
Special Non-Traditional Majors and Minors 30
Speech and Drama, Courses in 62
Statement of Purpose (Mission Statement) 3
Statement of Values 4
Student Conduct 92

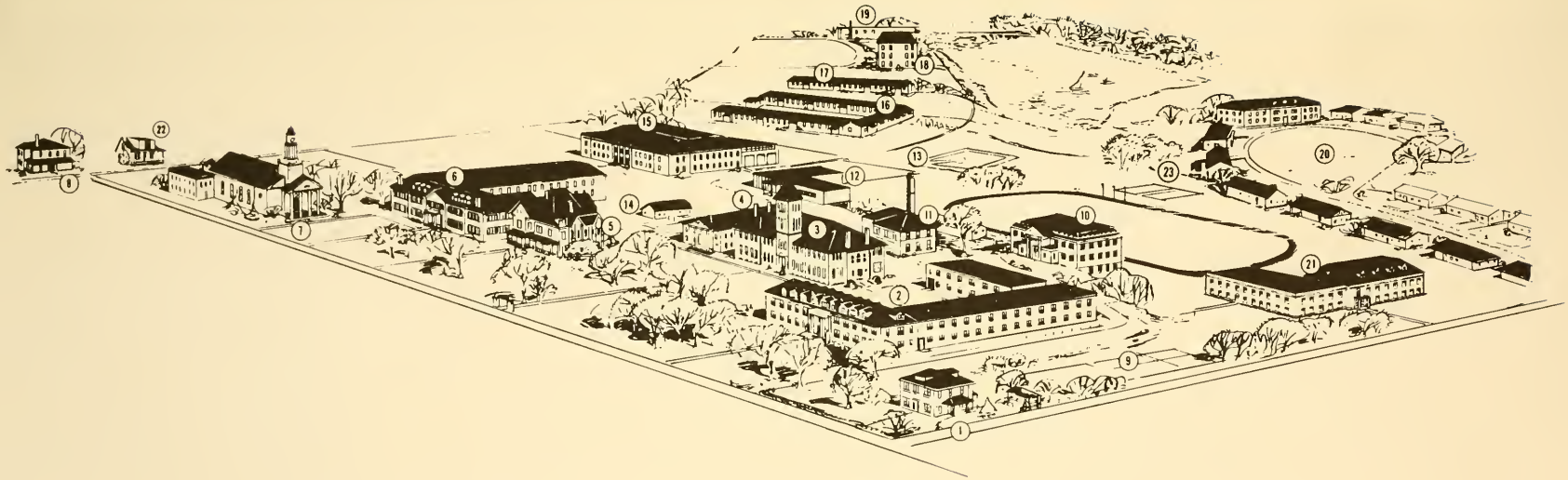
Student Financial Aid 12
Student Load 26
Student Organizations 90, 91
Student Teaching 48
Study Abroad 26
Sue Bennett College 35
Summer Orientation 8
Supplemental Education Opportunity Grant(SEOG) 13
Suspension 28

Teacher Education Program, Objectives 47
Teacher Education, Requirements for Admission to 47
Tests, Entrance (SAT, ACT) 7
Transfer and Advanced Standing 8, 29
Trustees, Board of 102
Tuition 10
Tutoring 31

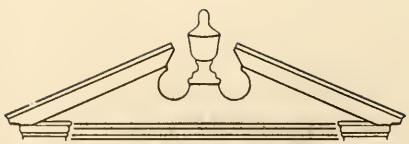
Undecided Majors 31
Undergraduate Calendar 1986-87 94

Vocational Education 50

Work-Grant 13
Work-Study Program 13



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Centennial Hall
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Tye House
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts



UNION
COLLEGE

Barbourville
Kentucky 40906
(606) 546-4151

UNION

1985-87 Graduate Catalog

LLEGE IN KENTUCKY • UNION COLLEGE • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY • UNION COLLEGE IN KENTUCKY

DIRECTORY FOR CORRESPONDENCE

Academic Work ..... *Dean of Graduate Academic Affairs*
Admission to the Graduate Studies Program ..... *Dean of Graduate Academic Affairs*
Alumni Affairs ..... *Director of Alumni Affairs*
Charges and Payment of Bills ..... *Business Manager and Treasurer*
Personal Welfare, Health of Students, Housing ..... *Dean of Students*
Scholarships, Workships and Loans ..... *Director of Student Financial Aid*
Transcripts—Academic Records—Veteran Affairs ..... *Registrar*

TELEPHONE COMMUNICATION

A campus-wide network of telephones enables the caller to reach any administrative or staff office by dialing the central switchboard.

Central Switchboard ..... (606) 546-4151
Pfeiffer Hall (Women's Residence) ..... (606) 546-3421
Stevenson Hall (Men's Residence) ..... (606) 546-3659

Union College is accredited by the Southern Association of Colleges and Schools, the Kentucky State Department of Education, and approved by the University Senate of the United Methodist Church.

It is the policy of Union College not to discriminate on the basis of sex, race, color, handicap, or national and ethnic origin in the admission of students or in its administration of educational programs, scholarships, loan programs, athletic participation, or other school-administered programs. Inquiries should be directed to Edward N. Black, Affirmative Action Coordinator.

DR. JACK C. PHILLIPS

Welcome To Union College

We welcome and invite you to examine the Graduate Studies Program of Union College. Founded in 1879 by Barbourville citizens and purchased in 1886 by the Methodist Episcopal Church, Union has as its chief mission, service to the Appalachian area of Southeastern Kentucky, Eastern Tennessee, and Southwestern Virginia.

With an enrollment of nearly 900 students, including both graduate and undergraduate persons, Union College is committed to excellence in the academic program. The College offers the Bachelor of Arts, the Bachelor of Science, the Master of Arts in Education Degrees, and Rank I Program, along with Associate of Arts Degrees and several one-and two-year programs.

Located on the historic Wilderness Road, Union is the oldest College in this tri-state area. There are now 8,095 graduates with 3,142 having the Master of Arts in Education Degree.

I am glad that you are interested in our graduate program and hope that you will like what you see in these pages. In fact, we hope you like it so much you will join us for many happy and profitable experiences.

Sincerely,

Jack C. Phillips

Jack C. Phillips
President

A History of Service

Union College was founded in 1879 by a group of progressive citizens of Barbourville who formed a stock company and secured the main part of the present campus. In 1880 the first building was formally opened on the site of what is now known as Centennial Hall.

The College was purchased by the Kentucky Conference of the Methodist Episcopal Church in 1886, and Daniel Stevenson, President of Augusta Collegiate Institute at Augusta, Kentucky, was made President of the reorganized institution. A major bequest from Mrs. Fanny Speed of Louisville led to the construction of Speed Hall, Stevenson Hall, and what is now Centennial Hall.

The college department was discontinued in 1908 and for eight years the institution was maintained as a Junior College, an academy, and an elementary school. It became a bona fide college again in the Presidency of Ezra T. Franklin who inaugurated a program of development during which the Memorial Gymnasium, now the Dramatic Art Center, and a home for the President were built, and the invested funds of the college were materially increased. In 1927 the College was accredited by the University of Kentucky as a four-year college of A grade.

President John O. Gross emphasized the improvement of the curriculum and the building of a strong faculty. His ambition was to see Union College fully accredited. In 1931 it was accredited by the University Senate of the Methodist Episcopal Church, and in 1932 full accreditation was realized when it was made a member of the Southern Association of Colleges and Schools. During this administration, land adjacent to the campus was purchased, a maintenance building was erected, and the financial structure was reorganized.

In Conway Boatman's twenty-one years of leadership, the college achieved substantial progress in both its educational and plant improvement programs. Seven new buildings were completed and others were enlarged. The curriculum was expanded, endowment funds were increased, and a markedly improved program of faculty salaries and benefits was adopted.

Mahlon A. Miller was elected to the presidency in 1959 and served in this capacity until 1982. In 1960 a Master of Arts in Education degree program was introduced and plant expansion continued with the development of College Park, a faculty residential area, followed by the construction of additional student housing, a physical education building and a student center. The latest addition, a science center was completed in 1973.

In response to the needs of graduate students, the college began to offer graduate classes in other communities in 1973. This program has since expanded to serve in-service teachers with extension courses in twelve or more communities throughout the region.

In 1975, Union College began offering the Specialist in Education degree (Ed.S.) and Kentucky Rank I certification with the administrator's certificate. Continuing for seven years, the Ed.S. program failed to generate the interest and needs of students and was therefore phased out. However, the Rank I program has continued to grow and draw students.

The college has always accepted a special mission to Appalachia, a thrust that is now being strengthened with unique academic programs based on regional characteristics, expanded student financial aid, student community service projects, and new career oriented curricula at the Associate Degree level. As the college moves into its second century it is expanding and enriching its service to Appalachia while at the same time fulfilling the needs of the many students from other states and other countries who come to Union College for an education.

In 1979 Union celebrated its centennial year with a year-long program of activities by students, faculty, alumni, Trustees, and friends. A centennial campaign provided funds to renovate the Classroom Building which was then re-named Centennial Hall.

In January of 1983, Jack B. Phillips became the 10th president of Union College with a promising future on the horizon for Union College.

The College has developed five succinct statements based on its Statement of Purpose that capture the important facets of the

college. They are as follows:

—Being Concerned For The Student As A Whole Person

—Providing An Outstanding Faculty Dedicated To Teaching.

—Maintaining Both Liberal - Arts and Career-Oriented Curricula.

—Serving The Appalachian Region and Valuing Its Heritage.

—Providing Opportunities for Individual Growth Through Service And Self - Government.

Purpose of Graduate Studies Program

The Union College graduate studies program is designed primarily for in-service teachers in the mid-Appalachian region of Kentucky, Tennessee, and Virginia, although students are attracted from states ranging from New York to Florida and a few foreign countries.

Major factors which draw these students include a flexible program which fits the work schedule of teachers, a dedicated and well trained faculty, a variety of areas of emphasis designed to improve the quality of education, and the individual attention available to each graduate student. A limited number of persons who do not have teaching or administrative certification enroll in the graduate studies program to broaden their background and their knowledge.

Rank II and Rank I programs which meet Kentucky certification standards for professional advancement are available as well as the traditional degree of Master of Arts in Education.

Union's graduates hold responsible positions in teaching and school administration throughout the Appalachian region.

The objectives of the Graduate Studies Program are:

(1) To prepare teachers and school leaders for greater service through extension of those fields of study which result in improved classroom instruction, informed administration and human understanding.

(2) To provide graduate study for those who seek an advanced degree beyond the baccalaureate program.

(3) To encourage the attainment of excellence in scholarship, the acquisition of special skills in the field of education, and to develop a sense of obligation to contribute to the intellectual, cultural and economic growth of the community.

(4) To prepare students to think critically, to express themselves creatively, and to make independent and rational judgments.

In 1979, long range goals were formulated and adopted by the Graduate Council with advice from the Graduate Advisory Council, graduate students, and graduate alumni of Union College. These goals, intended to complement the objectives of the Graduate Studies Program and not to replace them, follow:

1. To extend course offerings in which classroom teachers, administrators, and other school personnel may enroll to enable them to overcome felt deficiencies.
2. To systematically, on an annual basis, evaluate and analyze course objectives and content to determine whether current needs of students are being met.
3. To make a continuous effort to improve **admission** and **exit** criteria for students which would be commensurate with a quality education program.
4. To continuously improve and upgrade library holdings at a rate of four percent a year.
5. To continuously provide and improve means for students to acquire library materials in off-campus classes.
6. To promote seminars on campus for all faculty teaching graduate courses for the purpose of:
   - discussion of current issues and trends in education
   - upgrading instructional delivery systems
   - review and orientation to new materials and equipment
7. To provide a continuous opportunity for faculty development whereby faculty can attend professional meetings, participate in workshops, and prepare and deliver papers for learned societies.
8. To maintain a close working relationship with public school officials in the area in developing courses for the Fifth Year Program to meet the needs of in-service teachers and the school system.

GRADUATE CALENDAR 1985-86

Fall Semester 1985

August 20, Tuesday	**Last day to complete advance registration for fall semester**
August 31, Saturday	Graduate faculty meeting 10 a.m. SC 210
September 3, Tuesday	Graduate Registration 9:00 a.m. - 6:30 p.m. (Late fee $15 after September 4) Dormitories open at 8:00 a.m. First meal served at noon. Academic Advising
September 4, Wednesday	Last day for graduate students to submit proposal for Independent Study
September 5, Thursday	Classes begin.
September 9-13	Constitutes the first week for tuition refund purposes.
September 12, Thursday	Last day for schedule changes. Last day to register for fall semester.
October 9, Wednesday	Founders' Convocation
October 12, Saturday	Written exercise (Qualifying applicants to graduate candidacy) required of 5th year and M.A. applicants during 1st 12 hours of graduate work. 9:00 a.m. SC 210.
October 26, Saturday	NTE (Core) P.E. 205-206 8:00 a.m. (required of M.A. candidates and teacher education candidates)
October 30-November 8	Counseling sessions with advisors. (Classes meet as usual.)
November 9, Saturday	NTE - (Specialty Area) - P.E. 205-206 8:00 a.m.
November 18, Monday	Last day to withdraw from a course with a grade of "W."
November 26, Tuesday	Graduate Advisory Council Luncheon Dining Hall Annex
November 27-December 1	Thanksgiving vacation: no classes.
December 2, Monday	Classes resume.
December 4-13	Advising and advance registration for spring semester.
December 14, Saturday	Final examinations for Saturday classes.
December 17, 18, & 19	Final Examinations.
December 20, Friday	**Last day to complete advance registration for spring semester** Final grades for fall semester due. Last meal served at noon. Dormitories close at 4:00 p.m.

Spring Semester 1986

January 5, Sunday	Dormitories open at 1:00 p.m. First meal served at 4:30 p.m.
January 6, Monday	Academic Advising. Counseling and Orientation for new students.
January 7, Tuesday	Registration. (Late fee after this date.)
January 8, Wednesday	Classes begin.
January 13-17	Constitutes the first week for tuition refund purposes.
January 15, Wednesday	Last day for schedule changes. Last day to register for spring semester. Last day to apply for August graduation.
February 15, Saturday	Written exercise - (Qualifying applicants to graduate candidacy) - required of 5th year and M.A. students during first 12 hours graduate work - 9:00 a.m. - SC 210
March 5-6	Mid-semester Examinations (on regular class schedule.)
March 7, Friday	Spring vacation begins: no classes.
March 17, Monday	Classes resume.
March 19-20	Counseling sessions with advisors. (Classes meet as usual).
March 28-31	Easter vacation: no classes.
April 1, Tuesday	Classes resume.
April 5, Saturday	NTE - (Core Battery). 8:00 a.m. P.E. 204-7
April 11, Friday	Last day to withdraw from a course with a grade of "W."
April 19, Saturday	NTE - (Specialty Area) - 8:00 a.m. P.E. 204-7
April 21-May 2	Advising and advance registration for May Interim, Summer Sessions.

April 23, Wednesday	Honors Convocation.
April 26, Saturday	M.A. comprehensive exams - 8:00 a.m. P.E. 204-7
May 5, Monday	**Last day to complete advance registration for May Interim**
May 6, 7, & 8	Final Examinations.
May 10, Saturday	Commencement: 2:30 p.m.

May Interim 1986

May 12, Monday	Registration. Classes begin. (Late fee after this date.)
May 13, Tuesday	Last day for schedule changes.
May 16, Friday	Last day to withdraw from a course with a grade of "W."
May 30, Friday	Final Examinations.

Summer 1986-First Session

June 1, Sunday	Dormitories open at 1:00 p.m. First meal served at 4:30 p.m.
June 2, Monday	Advising and registration begins 8:00 a.m. (Late registration fee after this date.) Students may register for both Summer Sessions. Classes held on abbreviated schedule.
June 5, Thursday	Last day for schedule changes. Last day to register for first Summer Session.
June 28, Saturday	NTE - Core Battery - 8:00 a.m. P.E. 204-7
July 2, Wednesday	First Summer Session ends. Final examinations.

Summer 1986-Second Session

July 3, Thursday	Advising and registration: 9:00 a.m.-3:30 p.m. (Late fee after this date).
July 4, Friday	Holiday.
July 7, Monday	Classes begin on regular schedule.
July 12, Saturday	NTE - (Specialty Area) - 8:00 a.m. P.E. 204-7
July 18, Friday	Last day for schedule changes Last day to register for second Summer Session.
July 19, Saturday	M.A. Comprehensive Exams - 8:00 a.m. P.E. 204-7
August 4-6	Advance registration for fall semester.
August 8, Friday	Second Summer Session ends. Final examinations.
August 9, Saturday	Commencement: 10:30 a.m. Dormitories close at 4:00 p.m.

General Information

Location of the College

Union College is located in Barbourville, a residential town of 3,500, on U.S. Highway 25E midway between Lexington, Kentucky, and Knoxville, Tennessee. The historic Wilderness Road runs along the eastern edge of the campus. The Doctor Thomas Walker State Park is four miles from the campus and in adjoining counties are the Cumberland Falls State Park, the Levi Jackson State Park, and the Pine Mountain State Park.

Graduate students may enroll for a portion of their work in off campus locations near their home. Normally two classes a semester are offered at each location with a wider variety of courses available on campus in the evenings and on Saturday mornings.

OFF CAMPUS LOCATIONS: Corbin, Cumberland, Harlan, Hyden, London, Manchester, Middlesboro, Monticello, Pineville, and Whitley City.

Learning Resources

The ABIGAIL E. WEEKS MEMORIAL LIBRARY houses a collection of approximately 80,000 volumes. More than 350 periodicals are regularly received, along with indexing services to facilitate their use. It is also a selective depository for U.S. government publications. The stacks are open for use by all students. Regulations governing the use of library materials are available in the library and students in research are given instruction in the use of its facilities. The college houses a special Lincoln-Civil War collection containing over 1200 volumes, a curriculum library, and a music library with a collection of 3,500 recordings and musical scores.

By special arrangement periodicals and book collections may be delivered to extension sites to help ensure library resources for off-campus graduate students.

The LEARNING RESOURCE CENTER supplements the printed materials of the Library with a broad range of non-print media, including slides, audiotapes, videotapes, filmstrips and kits. The most recent hardware acquisitions include two small desk-top computer systems which are available for use by students and faculty. In addition to providing educational materials for classes and individualized instruction, the Center offers production services such as graphics, photography, and special media presentations. LRC staff also instruct students and faculty in the use of equipment and materials.

Computing Facilities

Computer instruction and use are available to all Union College graduate students.

Academic computing is supported primarily by three types of microcomputer: Apple IIe, TRS-80 Model III, and TEKTRONIX. A total of twenty such computers are available for classroom instruction, laboratory exercise, and individual use by students and faculty. With such microcomputers becoming more readily available in public and private schools, an increasing variety of opportunities is being offered for teachers to use this Union College equipment to learn to use computers effectively in their teaching.

Administrative computer applications are supported by a Hewlett-Packard minicomputer located in the Data Processing Center on campus. Four offices in Speed Hall have remote terminals through which they enter and retrieve data. Terminals located in the DP Center are used for data entry and program development. In addition, a statistical analysis program is run on the HP system. This package is used by all Educational Research classes as well as individual faculty or student researchers.

Campus Activities

Student activity fees are not required of graduate students. Graduate assistants, graduate students living on campus, or those residing near the campus are encouraged to take part in social and cultural functions of the college. Concerts, dances, special speakers, drama productions, movies and athletic events are available through the purchase of a student activity ticket each semester.

Automobiles

At the time of registration for classes, all students who possess automobiles must complete an automobile registration card. Students who wish to park on campus must pay a $5.00 parking fee and affix a Union College permit. Students must meet minimum insurance requirements as set forth by the Commonwealth of Kentucky.

Housing

Full-time graduate students may elect to live on-campus or obtain their own facilities in the community. Dormitory rooms are available and may be obtained through contact with the Dean of Students. All students living in the dormitories are required to obtain a boarding ticket and eat in the college dining hall.

A limited number of married student housing apartments are available. Applications should be made in advance with the Dean of Students.

ADMISSIONS

Admission to the Graduate Studies Program

All applicants for admission to the Graduate Studies Program must possess a baccalaureate degree from a regionally accredited four year institution. Applicants for the Rank I Program are expected to have earned a Master's Degree or the equivalent at such an institution. Applications should be filed 30 days prior to registration for the term the student expects to begin graduate work.

Applications will be filed on the form provided by the college and be accompanied by a check or money order for $15. The application fee is waived for Rank I applicants who have completed an M.A. or Fifth-Year program at Union College.

Two official transcripts of undergraduate and graduate work taken at other institutions must be filed in the Graduate Office before an applicant is admitted as a graduate student. In addition, students applying for admission to the fifth year or the M.A. program must submit two recommendations from professional persons who know the applicant. Recommendation forms are available in the graduate office.

A copy of the teaching certificate held by the applicant noting the areas in which the student is qualified to teach must be filed with the Graduate Office.

A limited number of students without teaching certificates are admitted to the Graduate Program. (However, these students cannot obtain certification unless the required courses for certification are taken). These persons desire to improve their academic background without teaching certification.

Applicants for admission to a program leading to a Fifth-Year Certificate (valid in Kentucky) must be teachers who have already completed one teacher education program and who are certified professionals. The admission to the program requires that the applicant (a) hold a baccalaureate degree from a regionally accredited 4 year institution, (b) exhibit an undergraduate grade point average of 2.50 or better, based on a 4 point system, and (c) hold (or previously held) a provisional teaching certificate.

Applicants to a program leading to a Master of Arts in Education Degree must possess a baccalaureate degree and exhibit an undergraduate grade point average of 2.50 or better based on a 4 point system.

An applicant whose undergraduate grade point average is less than 2.5 based on a 4 point system, or whose transcript shows less than a minor of twenty-one (21) semester hours credit in the field of teaching desired in his Master's degree program, may be admitted conditionally. Such students may be given the opportunity of proving their ability to earn a 3.00 grade average in the first 12 hours of graduate credit or be required to complete work on the undergraduate level to reach full admission requirements. Such work may be required in addition to the graduate hours required for the M.A. degree.

Applicants for admission to a program leading to the awarding of a Rank I Classification must have completed requirements for the M.A. degree or the Fifth-Year Certificate. A grade point average of 3.0 based on a 4 point system is required for unconditional admission to the Rank I program. Students who have earned a Fifth-Year Certificate are not eligible for admission to certification programs in administration and supervision.

Admission to any program leading to the M.A. degree or Fifth-Year Certificate is not equivalent to admission to candidacy for the M.A. degree or Fifth-Year Certificate.

Residence Requirements

A residence of at least one academic year or its equivalent in summer sessions and/or part time work is required. Courses offered by Union College in off-campus locations will apply toward the requirement. Although a variety of courses are scheduled in off-campus locations, no guarantee is made that all requirements can be met at these locations. Most graduate students find that a portion of their work must be completed on the campus in evening, Saturday, or summer classes.

Admission to Candidacy

Admission to candidacy for the M.A. degree and for the Fifth-Year Certificate requires formal application to the Office of Graduate Affairs and approval of the Graduate Council. The application is available in the Office of Graduate Affairs and must be filed when the student has:

(1) Shown an aptitude for graduate study by

the completion of a minimum of 12 semester hours in residence with a grade point average of at least 2.5 for the Fifth-Year or 3.0 for the M.A. degree.

(2) Satisfied any deficiency in oral or written English that has been reported by a member of the faculty.

(3) Has successfully prepared a written exercise in the Office of Graduate Academic Affairs. The exercise will require each student to compose an essay of approximately 500 words on a topic drawn from choices provided by the Department of Education. Each essay will be rated according to three criteria: (1) content, (2) structure, and (3) style. The student will have two chances to pass the exercise. For further details, the student is asked to check with the graduate office.

(4) Shown evidence of a valid teacher's certificate. The only exception to this is that a limited number of persons are accepted without teaching certificates as noted elsewhere.

(5) Taken the Core battery of the National Teacher's Exam. The Core battery of the National Teacher's Exam includes communication skills, general knowledge, and professional knowledge. Students should plan to take this exam before completing the first 12 hours of graduate work. Information on the minimum required score may be obtained in the Graduate office. A satisfactory score on the Graduate Record Examination will also meet this requirement.

Transfer Credit

A maximum of nine semester hours from a recognized and accredited graduate school may be transferred toward the M.A. degree. Requests for transfer credit must be directed to the Dean of Graduate Academic Affairs, be appropriate to the student's planned program, and carry a grade of at least "B". Fifteen semester hours may be transferred toward the Rank I program.

No credit is allowed toward the M.A. degree for courses taken by correspondence or from unaccredited institutions. Transfer credit should have been earned within the five year period prior to graduation (or within eight years if permission is received from the Graduate Dean and Graduate Council). Any exceptions to work earned beyond this time period must be petitioned by the student to the Graduate Council.

Planned Programs

Planned programs are required of all graduate students and are to be completed by the student and an advisor or Dean of Graduate Academic Affairs. The written program constitutes an agreement leading to the M.A. degree and/or certification program.

The planned program should be written during the first semester of graduate work so that all courses completed meet the college requirements. Any changes in the program must be approved by the Dean of Graduate Academic Affairs.

Time Limits

Students are expected to fulfill the requirements of the M.A. degree or advanced certificate within five years from the date of their acceptance into the program. Extension of the time limit may be granted for sufficient reason by the Graduate Dean and/or Council on written petition of the student.

Maximum Credit Loads

The maximum course load for full-time graduate students is fifteen semester hours for a regular semester, six hours per summer term, and three hours for an interim session. Graduate students engaged in full-time employment are restricted to six semester hours for a regular semester and three hours for a summer term. Ten hours per semester constitutes a full load. Students taking 10 or more hours must pay full tuition charges as found under expenses in this catalog.

Credit may not be earned concurrently at another institution without the permission of the Dean of Graduate Academic Affairs, and then only within the total limits indicated above.

Seniors as Part-time Graduate Students at Union

The option to enroll in 400G-level courses is open to seniors lacking no more than six credit hours for graduation and satisfying the following conditions:

1. Have a grade point average of at least 3.0 on all work attempted.
2. Secure the approval of the Dean of the Graduate Studies Program, the student's advisor, and the Registrar.

3. The total student academic load may not exceed twelve credit hours for the semester.
4. All requirements for the undergraduate degree must be completed during the semester or summer in which the student is allowed to register for part-time graduate work.

Graduate credit will be allowed for only those courses beyond the requirements for the undergraduate degree.

In addition to the application for admission to the Graduate Studies Program, the student should fill out a petition form listing the course or courses to be taken to complete the undergraduate degree as well as courses to be taken for graduate credit.

The petition must be approved by both the Dean of the Graduate Studies Program and the Registrar.

Independent Studies, TV Courses, Workshops

A student may take a total of 9 hours in TV courses, workshops, and independent studies at the Master's level, and a total of **12** hours on the 60 hour graduate program (M.A. + 30 or Rank I).

While the chief purpose of the independent study is to afford the student an opportunity to obtain credit for study outside the regular course offerings of the graduate program, permission may be granted under special conditions for a student to take a regularly scheduled course as an independent study.

Transient students and students beginning their graduate studies are not permitted to take a course on an independent study basis.

Credit for independent studies done at other accredited institutions will be accepted provided such credit meets the Union College transfer credit requirements.

All proposals for independent study must be approved by the Dean of Graduate Academic Affairs. It is the student's responsibility to work with a professor in planning the course of study and to present the proposal for approval no later than three days after the registration date of the semester during which the work is to be accomplished. Forms for independent study must be obtained from the office of graduate academic affairs.

National Teacher's Exam

All students who have begun graduate work since September 1, 1979 must take the NTE (core battery) before being admitted to candidacy for the **M.A.** degree or Fifth-Year Certificate. However, students who have taken the GRE with an acceptable score will be exempt from the NTE. Please check with the Graduate Office for application form and the dates the NTE is given.

Comprehensive Examination

A comprehensive examination is required for the M.A. degree; it is not required for the award of 5th Year or Rank I classification.

MASTER OF ARTS IN EDUCATION—the candidate is required to demonstrate his professional growth through a three part written examination from courses in the professional block (see section on Curricula listing courses in the professional block). The exam presently consists of the following three parts:

1) an essay to be written by the student from a selected list of topics;
2) A research study which the student is asked to analyze;
3) Multiple choice items which the student may choose containing questions from advanced reading courses (and other professional courses) or questions from courses in the professional block which contain no reading items.

Changes in the comprehensive exam are anticipated in the near future. Details may be gotten in the graduate affairs office.

The examination is scheduled in July and April of each year. Candidates may file an application for the comprehensive examination with the Graduate Office during the semester they complete at least 24 credit hours toward their degree. Students are permitted to take the exam three times. If a student fails the exam and is scheduled to graduate at the end of that term, he/she has an option of taking an oral exam before a faculty committee or repeating the exam the next time it is given.

Master of Arts Thesis

Students may opt to write a thesis in partial fulfillment of the requirements for the M.A. degree. The thesis is a systematic, writ-

ten presentation of the results of a study, investigation or research. Thesis credit will fulfill six hours in the elective component of the M.A. program. A student completing a Master's Thesis will be exempt from the comprehensive examination.

The Union College Graduate Council views the Master's Thesis as a completed document that demonstrates a high degree of competence in originality and creativity. Before registering for Educ. 599 (Thesis), the student must complete a total of 15 semester hours of graduate work including Educ. 500 - Educational Research.

Students choosing the thesis route must have an advisory committee of at least 3 faculty members who regularly teach graduate courses. The chairman shall be from the student's major area of interest. At least one member shall be from the area of education, and at least one member shall be from outside the field of education. The Dean of Graduate Academic Affairs shall serve as ex officio member. The names of the committee shall be submitted to the Dean for approval.

The committee, appointed by the Dean of Graduate Academic Affairs, shall review the student's proposal to ensure that the problem to be investigated is a significant one, that a thorough review of the literature has been conducted, and that the student is planning to use proper methodology.

The completed draft of the thesis (prepared according to standard guidelines) is to be presented to the chairman of the student's advisory committee at least 30 days before graduation. A final oral examination (conducted by the committee) on the thesis is to be successfully completed 10 days before graduation. Four copies of the completed thesis and an abstract (150-350 words) are to be presented to the Dean one week before graduation.

If the thesis is not completed within two semesters after the student registers for Educ. 599 (Thesis), the candidate must continue to register each semester until the thesis is completed. The student shall pay a continuous registration fee of one credit hour tuition charged each semester until the thesis is completed unless it is otherwise waived by the thesis committee. Exceptions must be recommended by the thesis committee and approved by the Graduate Council.

Detailed information concerning the thesis may be obtained in the Graduate Office.

The Marking System and Quality Points

Marks are reported in letters as follows:

A— Represents distinctly superior work, valued at four quality points for each semester hour.

B— Represents above average work, valued at three quality points for each semester hour.

C— Represents average work, valued at two quality points for each semester hour.

D— Represents inferior but passing work, valued at one quality point.

F— Indicates failure with 0 credits and 0 quality points for each semester hour.

W— Indicates that a student withdrew during the first 12 weeks of the semester.

I— Indicates that in the option of the instructor the student has not been able to complete the required work of the course due to unavoidable circumstances.

Incomplete Grade

An "I" received at the end of any semester must be removed before the end of the next semester if the student is enrolling for that term. If the student is not enrolling, the "I" must be removed before the end of the 12-month period following the date on which the "I" was received or the "I" becomes an "F" automatically.

Any exceptions to the time limit must be made by a written statement initialed by the student and agreed upon by the instructor, registrar, and Dean of Graduate Academic Affairs.

The Dean of Graduate Academic Affairs is given the authority (by the Graduate Council) to change a student's grade of "I" to a "W" rather than an "F", when in his judgment a grade of "F" is not justified.

If a course is repeated at Union College, only the second grade is used in computing the student's grade point average.

Course Numbering System

Courses numbered 400G are open to graduate students up to a maximum of 15 credit hours at the M.A. level and 6 credit hours at the Rank I level. Since these courses are available to advanced undergraduate students, care must be exercised to avoid duplication of courses already taken. Dual credit is not allowed in meeting graduation requirements.

Courses numbered 500 are limited to graduate students. Courses numbered 600 are intended primarily for Rank I students although 9 hours of 600 level courses may be taken by M.A. candidates. Any exception to this must be granted by permission of the Dean of Graduate Academic Affairs.

Interdepartmental Numbers

Some special numbers are reserved for specific types of courses or studies. They may be used by any department offering graduate work although they are not shown in the specific catalog listings.

581, 681	"Special Topics"—classes developed on a one-time or experimental basis or a special innovative class
582, 682	Special Workshop
583	Television courses through the Kentucky Educational TV Network
595, 695	Independent Study—research on approved topics not found in regular courses—may be repeated on different topics
599	Graduate Thesis

Expenses and Financial Aid

GRADUATE EXPENSES
(Regular Semester)

Graduate Tuition, per semester hour	$ 85.00
Full Time Tuition (10 or more hours)	2,050.00
Activity Card (boarding students only)	25.00
Double dormitory room (per semester)	265.00
Private dormitory room (per semester)	345.00
Board (19 Meal Week)	700.00
Married Student Apartment (per month, including utilities)	140.00

FEES

Late Registration Fee*	15.00
Graduate Admission Fee	15.00
Graduation Fee (M.A. and 5th Year)	35.00
Graduation in Absentia Fee	25.00
Transcript (after first free copy)	3.00
Audit fee, per semester hour	15.00
National Teacher's Exam (Core Battery)	48.00
M.A. Comprehensive Exam	5.00

SUMMER EXPENSES
(5 Week Summer Session)

Graduate Tuition, per semester hour	85.00
Board, (full five weeks)**	225.00
	(21 meals per week)
Board (short 5 weeks)**	180.00
	(14 meals per week)
Room (Regular)	80.00
Room (Private)	105.00

Short term courses and workshops less than the time stated would have room and board charges prorated accordingly.

---

*Late registration fee can be waived by the Registrar for sufficient reason if permission is requested in advance.

**Board is subject to change pending contract agreements.

Payment Policy

I. Financial Clearance

A student will be cleared for registration only if any previous balance has been paid. The new semester's account must then be paid in full, or a signed payment plan and first installment completed. Summer school and short sessions must be paid in full at the date of registration—no payment plan is permitted for summer or short sessions.

A student having any unpaid balance will not be cleared for the release of an official report of grades, a transcript of credits, or a diploma.

II. Advance Registration

In case of advance registration, if financial arrangements are not completed by the date indicated on the class schedule, the advance registration will be removed from the computer and the registration procedure will have to be repeated.

III. Finance Charge

A monthly finance charge of one and a half percent (18% annual rate) will be added to any unpaid balance of a student's account.

IV. Payment Plan

If the new semester's account cannot be paid before registration, a payment plan

signed by the student can be completed and a first installment paid down. The payment plan requires one-third payment on each of the following dates after which the student will be withdrawn from courses if the account is not paid up:

1. On or before fall semester or spring semester registration — one-third.
2. Due October 5th (fall semester) or February 5th (spring semester) — one-third + 1½%.
3. Due November 5th (fall semester) or March 5 (spring semester) — one-third + 1½%.

Students who owe a balance on their account after November 15th (fall) or March 15th (spring) may be subject to withdrawal procedures.

Refund Information

Since faculty contracts and other commitments are made by the College for the entire year in advance, the following refund schedule has been established in order that the College and the student may share the loss equitably when it is necessary for a student to withdraw or make a change in his or her program.

1. A student is considered to be enrolled until he or she completes drop/withdrawal procedures. These procedures must be completed in person or by mail. Necessary forms must be obtained from the Office of the Registrar. All refunds will be based on the date these drop/withdrawal forms are completed and returned to the Office of the Registrar.
2. A full refund may be obtained for a class only if a student has never attended that class.
3. Any portion of board charges unused up to date of withdrawal will be refunded, except that a full week's board will be charged for any fraction of a week.
4. Tuition and room charges will be refunded on the following basis:

   Regular Semester—Twenty percent of the total for tuition and room will be charged the first week, 40% the second week, 60% the third week, 80% the fourth week. No refund will be given after the fourth week. Any part of a week will be treated as a full week.

   Summer and Short Terms—Withdrawal up to the end of the first week will permit a 50 percent refund. No refund will be made after the end of the first week. Any part of a week will be treated as a full week.
5. **Refund of Overpayment on Student Account**—If a student makes an overpayment on his or her account, a written request for refund must be submitted to the Business Office within one year after the end of the last academic term for which the student was enrolled.
6. **Room Reservation Deposit**—This deposit will be refunded if the request is made in writing not later than August 1 for the fall semester or 30 days before the opening of any other semester for which the contract is first effective. Students, once enrolled, must submit a written request to the Dean of Students at least 30 days before the end of the term, for cancellation of the contract. This deposit will be refunded within 60 days upon receipt of written authorization by the Dean of Students indicating that the depositor is no longer enrolled as a student at Union College and that he or she has left the housing facility undamaged and does not owe other bills. The request for this authorization must be made within one year after the end of the academic term for which the student was enrolled.
7. Questions regarding refunds may be addressed to the Dean of Students or appealed to the Vice President for Student Affairs.

Financial Assistance:

Limited financial aid and work-study opportunities are available to graduate students who demonstrate financial need. The Financial Aid Office can supply the necessary application forms. Application should be made two months prior to enrollment.

National Direct Student Loans are available to those with determined need. The interest rate is 5% and repayment begins six months after the student graduates or drops below six hours enrollment.

Guaranteed student loans are available through banks in a student's home state. The interest rate for first-time borrowers is now 8% with a 6-month grace period following less than half-time enrollment.

Students eligible for Veteran's Benefits should contact the Registrar for information concerning procedures required to receive those benefits.

CURRICULA

Degree and Certificate Requirements

Fifth-Year Certificate*

All new provisional teaching certificates in Kentucky are issued on the basis of a four-year program and a bachelor's degree. These certificates are valid for an initial period of up to ten years and are renewed on a "completion of a planned fifth-year program of college work". The fifth-year requirement applies to all public school teachers and may be met through the completion of an approved Master's program or a special certificate program appropriate to the needs of their teaching assignments.

The Fifth-Year Program is open to any student who has completed one Teacher Certification Program and who wishes to qualify for Rank II under the Foundation Law of Kentucky.

The student must fulfill the following requirements for the Fifth-Year Certification:

(1) Plan a 32 semester hour of studies with an advisor or Dean of Graduate Academic Affairs.

(2) Achieve a grade point average of at least 2.50 in the program.

(3) At least 12 semester hours of the program must be in professional education courses.

(4) Twelve hours must be earned in the student's field of specialization.

(5) At least 18 hours of credit must be earned in residence at Union College. Some credit may be approved on the undergraduate level for the program if such training will strengthen the teacher's performance. No credit will be allowed for correspondence study.

The State Department of Education has adopted an option whereby some Continuing Education credit (CEU) and in-service training may be credited toward the certificate.

Students desiring to earn CEU credit(s) at another institution must obtain permission from the Dean of Graduate Academic Affairs to transfer such credit toward the Fifth-Year Certificate Program at Union College.

Fifth-Year Certificate

(Elementary or Secondary Certificate, Rank II)

I. Professional Education ..... 12 semester hours

Secondary Majors	Elementary Majors
Must include: Educ 501, 502, 604	Must include one from: Educ 501, 502
One course from: Psyh 600, 650	One course from: Psyh 600, 650
	One course from: Educ 520, 530
	Must include: Educ 603

II. Specialization Component ..... 12 semester hours
Courses Must be chosen from the student's area of specialization

III. Electives ..... 8 semester hours
May be chosen from the area of specialization or other graduate courses.

*Students earning the Fifth-Year certificate are not eligible to enter the principalship or supervisor of Instruction Certification curriculum. However, they may seek Rank I in elementary or secondary teaching.

Endorsement Of High School Certificate For Classroom Teaching At The Elementary School Level

An endorsement for classroom teaching at the elementary school level shall be issued in accordance with the pertinent Kentucky statutes and State Board of Education regulations to an applicant who holds a certificate valid for classroom teaching at the high school level and who has completed the approved program of preparation for the elementary endorsement at a teacher education institution approved under the standards and procedures included in the Kentucky Standards for the Preparation-Certification of Professional School Personnel.

A considerable number of the required courses listed below are graduate level and may be applied to the M.A. degree. Detailed information is available in the Graduate Office.

Math 203, Math 204 - Structure of the Number System ..... 6 hrs.
or
Math 531 - Topics in Modern Math for Elem. Teachers ..... 3 hrs.
English 355 - Children's Literature ..... 3 hrs.
Art 271 - Elementary School Art ..... 3 hrs.
or
Music 373 - Elementary School Music ..... 3 hrs.
Psyh 361 - Psychology of Learning ..... 3 hrs.
or
Psyh 470G - Theories of Learning ..... 3 hrs.
Psyh 565 - Psychology of Exceptional Children ..... 3 hrs.
6 hours must be taken in Reading
Educ 361 - Reading in the Primary Grades ..... 3 hrs.
and
Educ 362 - Teaching Reading in the Content Subjects ..... 3 hrs.
OR two of the following Reading courses:
Educ 520 - Techniques and Materials for Classroom Reading Instruction ..... 3 hrs.
Educ 530 - Diagnostic and Remedial Procedures in Reading ..... 3 hrs.
Educ 620 - Teaching Reading in the Content Field ..... 3 hrs.
Educ. 341 - Methods of Teaching Math in the Elementary School ..... 3 hrs.
or
Math 532 - Modern Math Laboratory ..... 3 hrs.
Educ. 432 - Methods and Materials in the Elem. School ..... 4 hrs.
or
Educ. 603 - Elem. School. Curriculum ..... 3 hrs.
Educ. 433 - Supervised Student Teaching in the Elem. School ..... 6 hrs.
(For students who have had NO teaching experience)
OR
Educ 435G - Laboratory Experiences in Education ..... 3 hrs.
(for students who have completed 1 year of full-time teaching or its equivalent. Proper documentation of the teaching experience must be submitted by the school official where the teaching was completed).

Endorsement Of High School Certificate For Teaching In The Middle Grades

An endorsement for classroom teaching in the middle grades 5-9, shall be issued in accordance with the pertinent Kentucky statutes and State Board of Education regulations to an applicant who holds a certificate valid for classroom teaching at the high school level and who has completed the approved program of preparation for the middle grades endorsement at a teacher education institution approved under the standards and procedures included in the Kentucky Standards for the Preparation—Certification of Professional School Personnel.

This program will be implemented by the Graduate Studies Program in the 1985-86 school year. Details may be obtained in the Graduate Affairs Office.

Master of Arts in Education

The Master of Arts in Education program is primarily designed for in-service teachers in the public schools. Graduation requirements include the completion of a planned program chosen from the majors following in this section, a minimum grade point average of 3.00, and satisfactory performance on the comprehensive examination. Candidates should review the catalog section on academic information concerning candidacy, transfer credits, time limits, credit loads, etc. A minimum of 15 credit hours must be earned in courses numbered 500 or higher.

ELEMENTARY EDUCATION CURRICULUM (M.A.)

(Standard Elementary Certificate and Rank II)*

*All curricula listed meets certification requirements of the Kentucky State Department of Education. Students from states outside of Kentucky are advised to check with their state department of education if certification is desired. An M.A. degree in elementary education does not ensure certification.

(1) Professional Education ..... 9 semester hours
Required:
EDUC 500, EDUC 520 or 530 (one course)
One course from the following: EDUC 501, 502, PSYH 600, 650

(2) Specialization Component ..... 12 semester hours
Non-education courses should be carefully chosen which strengthen the background of the elementary teacher. The following courses are suggested: ENVS 469G, 550; GNSC 401G, 525, 561; MATH 531, 532; HLTH 451G, 582; SOCI 511, PSYH 431G, 470G, 565.

(3) Electives ..... 9 semester hours
May be chosen from any of the above courses or other graduate courses. Students electing to continue their training in administration may use these electives to begin an administrative program or strengthen their backgrounds in behavioral science. EDUC 441G, 468G, 511 and 603 are strongly recommended.

Kindergarten Teacher Preparation

An endorsement for teaching kindergarten shall be issued to an applicant who holds a certificate valid for classroom teaching at the elementary level and who has completed the program below for the kindergarten endorsement.

EDUC 440G. Introduction to Early Childhood Education ..... 3 hrs.
EDUC 542. Fundamentals of Kindergarten Education ..... 3 hrs.
EDUC 545. Practicum in Kindergarten Education ..... 6 hrs.

A portion of the kindergarten program may be included in the program leading to the standard elementary certificate. For details the applicant should consult the Graduate Affairs Office.

The Kindergarten program is offered in the Summer in even years.

Gifted Education Teacher Preparation

An endorsement as teacher for gifted education shall be issued to an applicant who holds a certificate valid for classroom teaching at the elementary school level, the middle grade level, or the high school level; who has completed at least three (3) years of successful teaching experience; and who has completed the program listed below for the gifted endorsement. The endorsement shall be valid for the same grade levels as the base certificate.

EDUC 550. Foundations of Gifted Education ..... 3 hrs.
EDUC 551. Curriculum Development for Gifted Children ..... 3 hrs.
EDUC 552. Instructional Strategies and Materials ..... 3 hrs.
EDUC 553. Practicum for Gifted Education ..... 3 hrs.

A portion of the program may be included in the graduate program leading to a standard certificate at the elementary or secondary level. For details the applicant should consult the Graduate Affairs Office.

Reading Specialist Preparation

The endorsement for reading specialist shall consist of the M.A. degree, completion of three (3) years of successful classroom teaching and shall be valid for the same teaching level as the teaching certificate used as a base for the endorsement. The applicant must take the following graduate level **reading** courses:

EDUC 530. Diagnostic and Remedial Procedures in Reading . . . . . 3 hrs.
EDUC 532. Techniques and Materials for Remedial Reading . . . . . 3 hrs.
EDUC 535. Practicum in Teaching Reading with Clinic . . . . . 3 hrs.
PSYH 525. Psychology of Reading . . . . . 3 hrs.

For the remainder of courses needed, the applicant must consult the Graduate Affairs Office.

The reading specialist program is offered in the summer in odd years.

HEALTH CURRICULUM (M.A.)

(Standard Secondary Certificate and Rank II)

(1) Professional Education . . . . . 12 semester hours
Must include:
Educ. 500, 501, 502
One course to be chosen from:
Psyh. 600, 650

(2) Health Component . . . . . 12 semester hours
Selected from Hlth. 451G, 475G, 551, 582, 595.

(3) Electives . . . . . 6 semester hours
May be selected from area (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

ENGLISH CURRICULUM (M.A.)

(Standard Secondary Certificate and Rank II)

(1) Professional Education . . . . . 12 semester hours
Must include:
Educ. 500, 501, 502
One course to be chosen from:
Psyh. 600, 650

(2) English Component . . . . . 15 semester hours
Educ. 520 or 530 and four courses chosen from:
Engl. 401G, 402G, 419G, 421G, 521, 522, 541, 542, 572, or 595

(3) Electives . . . . . 3 semester hours
May be selected from area (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

SCIENCE CURRICULUM (M.A.)

(Standard Secondary Certificate and Rank II)

(1) Professional Education . . . . . 12 semester hours
Must include: Educ. 500, 501, 502
One course to be chosen from: Psyh 600, 650

(2) Science Component . . . . . 12 semester hours
Students choosing to professionalize in one subject will take a minimum of 12 hours in that subject: those choosing to professionalize both a major and a minor subject will take a minimum of 6 hours in the minor. Three of these hours should be for a research investigation (595) unless the M.A. thesis option is chosen below. See course offerings in the catalog section of course descriptions.

(3) Electives . . . . . 6 semester hours
Recommended:
M.A. thesis (6 hrs.)
or
Educ 604 (3 hrs.) and 1 course from area (1) above or from other academic disciplines with approval of the Dean of Graduate Academic Affairs.

SOCIAL SCIENCE CURRICULUM (M.A.)*

(Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 12 semester hours
Must include:
Educ. 500, 501, 502
One course to be chosen from:
Psyh. 600, 650

(2) Social Science Component ..... 12 semester hours
Selected from: Soci. 421G, 435G, 460G, 464G, 511, 595
Hist. 421G, 442G, 446G, 470G, 475G, 531, 551, 595

(3) Electives ..... 6 semester hours
May be selected from area (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

*Open to those holding certification in a social studies concentration or having a history major or minor.

HISTORY CURRICULUM (M.A.)

(Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 12 semester hours
Must include:
Educ. 500, 501, 502
One course to be chosen from:
Psyh. 600, 650

(2) History Component ..... 12 semester hours
Selected from: History 421G, 442G, 446G, 470G, 475G, 521, 531, 551, 595.

(3) Electives ..... 6 semester hours
May be selected from area (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

PSYCHOLOGY CURRICULUM (M.A.)

(Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 12 semester hours
Must include:
Educ. 500, 501, 502
One course to be chosen from:
Psyh. 600, 650

(2) Psychology Component ..... 12 semester hours
Selected from: Psychology 402G, 430G, 431G, 452G, 460G, 461G, 470G, 595, 640

(3) Electives ..... 6 semester hours
May be selected from area (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

SOCIOLOGY CURRICULUM (M.A.)

(Standard Secondary Certificate and Rank II)

(1) Professional Education ..... 12 semester hours
Must include:
Educ. 500, 501, 502
One course to be chosen from:
Psyh. 600, 650

(2) Sociology Component ..... 12 semester hours
Selected from: SOCI 421G, 435G, 460G, 464G, 511, 595

(3) Electives ..... 6 semester hours
May be selected from area (1) or (2) above or from other graduate disciplines with approval of the Dean of Graduate Academic Affairs.

ADMINISTRATIVE CERTIFICATION CURRICULA

(M.A. plus 15 semester hours)*

ELEMENTARY SCHOOL PRINCIPAL

The program of preparation for the Professional Certification for School Administration and Supervision, endorsed for the position of Elementary School Principal, shall consist of a minimum of 45 semester hours graduate credit, including the master's degree. The applicant must have completed the graduate program for the Standard Elementary Certificate, and had 3 (three) years of successful teaching experience.

The required courses in addition to the M.A. degree** include:
- EDUC 603 - Elementary School Curriculum
- EDUC 502 - Curriculum Design or
- EDUC 600 - Advanced Curriculum is a prerequisite.
- EDAD 655 - The Elementary School Principal
- EDUC 401G - Introduction to Counseling and Guidance
- EDAD 654 - Improvement of Instruction through Supervision
- EDAD 675 - Internship and Seminar in Administration
- EDUC 511 - Tests and Measurements
- EDUC 500 - Methods of Educational Research

*Students outside Kentucky desiring Administrative Certification in their respective state should consult appropriate officials in that state for certification requirements.

**Some of the required courses are taken at the M.A. level.

Students holding the standard elementary teaching certificate and Elementary Principalship Certification may acquire endorsement certification as Secondary Principal by fulfilling the following requirements:

1. The Secondary School principal - EDAD 656
2. Secondary School Curriculum - EDAD 604

SECONDARY SCHOOL PRINCIPAL

The program of preparation for the Professional Certificate for School Administration and Supervision, endorsed for the position of Secondary School Principal, shall consist of a minimum of 45 semester hours graduate credit, including the master's degree. The applicant must have completed the graduate program for the Standard High School Certificate, and had 3 years of successful teaching experience.

The required courses in addition to the M.A. degree* include:
- EDUC 604 - Secondary School Curriculum
- EDUC 502 - Curriculum Design or
- EDUC 600 Advanced Curriculum is a prerequisite.
- EDUC 656 - The Secondary School Principal
- EDUC 401G - Introduction to Counseling and Guidance
- EDAD 654 - Improvement of Instruction through Supervision
- EDAD 675 - Internship and Seminar in Administration
- EDUC 511 - Tests and Measurements
- EDUC 500 - Methods of Educational Research

*Some of the required courses are taken at the M.A. level.

Students holding the standard secondary teaching certificate and secondary principalship certification may acquire endorsement certification as elementary principal by fulfilling the following requirements:

1. EDUC 603 - **Elementary School Curriculum**

2. EDAD 655 - **The Elementary School Principal**

3. EDUC 520 - **Techniques and Materials for Classroom Reading Instruction,** or
   EDUC 530 - **Diagnostic and Remedial Procedures in Reading**

4. Select one of the following courses:
   EDUC 441G - **Teaching Social Studies** or MATH 532 - **Modern Math Laboratory**
   or GNSC 525 - **Science for the Elementary Grades.**

5. EDAD 675 - **Internship and Seminar in Administration**
   Students may fulfill this requirement for both elementary and secondary certification by working with an elementary and secondary principal concurrently.

Students desiring certification in principalship must fulfill requirements for the area of their undergraduate certification. That is, an elementary major who wishes to become a secondary principal must complete requirements for elementary principalship certification prior to or simultaneously with the secondary principalship endorsement. The same applies to a secondary major desiring certification in elementary principalship.

SUPERVISOR OF INSTRUCTION
(K-12)

The program of preparation for the Professional Certificate for School Administration and Supervision, endorsed for the position of Supervisor of Instruction, shall consist of a minimum of 45 semester hours graduate credit, including the master's degree. The applicant must have completed the curriculum of preparation for either the Standard Elementary Certificate or the Standard High School Certificate, and had 3 years of successful teaching experience. Students outside Kentucky should consult appropriate officials in their own state for certification requirements for the position.

The required courses in addition to the M.A. degree* include:

EDUC 520 - **Techniques and Materials for Classroom Reading Instruction** or
EDUC 530 - **Diagnostic and Remedial Procedures in Reading**
(Teaching of Reading is a pre-requisite). If student has had no reading courses, he/she must take both courses or an appropriate substitute in lieu of one of the above.
EDUC 511 - **Tests and Measurements**
EDAD 654 - **Improvement of Instruction through Supervision**
EDAD 675 - **Internship and Seminar in Administration**
EDAD 660 - **School and Community Relations**
PSYH 565 - **Psychology of Exceptional Children**
PSYH 640 - **Group Processes**
EDUC 603 - **Elementary School Curriculum**
EDUC 604 - **Secondary School Curriculum**

*Some of the required courses are taken at the M.A. level.

Director Of Pupil Personnel

The program of preparation for the Professional Certificate for School Administration and Supervision, endorsed for the position of Director of Pupil Personnel, shall consist of a minimum of 45 semester hours' graduate credit, including the master's degree, and shall include the following preparation.

The required courses in addition to the M.A. degree include:
EDUC 500 - Methods of Educational Research

PSYH 600 - Advanced Human Development
EDAD 642 - Administration of Pupil Personnel Services
EDAD 643 - Pupil Personnel Accounting and Record Management
EDUC 401G - Introduction to Guidance and Counseling
PSYH 565 - Psychology of Exceptional Children
EDUC 573 - Computers in Education**

*Applicant must have (3) years successful teaching experience.
**An undergraduate basic computer course may suffice for certification.

RANK I CLASSIFICATION

Kentucky's Rank I classification requires the completion of a planned program of 30 semester hours beyond the Master's level. The program for the Rank I must include a minimum of 12 hours of 600 level courses and may include a maximum of 6 hours of 400G level courses.

Each program is specially planned for the student and requires a conference with the Dean of Graduate Academic Affairs or an Advisor prior to enrollment. Up to 15 hours of credit may be transferred from other graduate institutions if appropriate to the student's planned program and carries at least a grade of "B".

A grade point of at least 3.00 is required for certification and no comprehensive examination is required. Correspondence courses and independent studies may not be transferred into the program.

Although each program is individualized, the guidelines below will prevail in the planning of the program. Some courses may have been taken at the Master's level, and appropriate courses may be substituted with the permission of the Dean of Graduate Affairs.

Students who are admitted to Rank I program must:
(1) Make application. Have two different transcripts sent to Graduate Office, Union College. There is no fee for students who received the M.A. or 5th Year at Union College.
(2) Submit latest certificate earned to Graduate Office.

Students who complete requirements for Rank I must file a request in the Registrar's office for transcripts to be sent to appropriate officials. This applies to all students who are completing Rank I for certification or a change in rank or both.

Proper Certification forms are available in the registrar's office and should be secured before the end of the term in which the student is completing his or her work.

ELEMENTARY OR SECONDARY TEACHER (Rank I)*

(1) Professional Education ..... 9 semester hours
Must include EDUC 500, 501, 670
Suggested courses EDUC 511, PSYH 470G, 650
(2) Specialization Component ..... 12 semester hours
Include only Non-education courses.
Suggested courses: PSYH 565 and 600
(3) Related Fields ..... 9 semester hours
Must include EDUC 603 or 604, EDAD 630
Remaining courses should be taken from: EDUC 468G, 502, 600, 620

*Some courses listed as required may have been taken at the M.A. or fifth year level. Appropriate courses may be substituted by consulting with advisor or Dean of Graduate Academic Affairs.

READING SPECIALIST

Certification as a Reading Specialist may be earned at Rank I level providing the requirements are fulfilled as listed in the previous section of the Catalog and including four 600 level courses.

KINDERGARTEN ENDORSEMENT

Persons holding elementary certificates may earn Kindergarten Teaching endorsements at Rank I level providing the requirements are fulfilled as listed in the previous section of the Catalog and including four 600 level courses.

ELEMENTARY OR SECONDARY PRINCIPALSHIP

(Principal's Certificate for Grades 1-8 or 7-12, and Rank 1)*

(1) Professional Education ..... 6-9 semester hours
Must include: EDUC 500, 501, 511
Suggested courses: PSYH 470G, 650

(2) Specialization Component ..... 9-12 semester hours
Elementary Principalship must include:
EDUC 603, 520 or 530, and EDAD 655
Secondary Principalship must include:
EDUC 604, EDAD 656.
Elementary Principalship or Secondary Principalship
must include: EDUC 401G, EDAD 654, 675
Suggested courses: SOCI 511, PSYH 565, 600, 650
EDAD 630, 640, 650, 660

(3) Related Courses ..... 9-12 semester hours
Must include EDUC 502 or 600, 670
Suggested: EDAD 645.
A minimum of four 600 level courses are required; a maximum of two 440G level courses may be taken. Three years of successful teaching experience at the level of certification is required for the Principalship endorsement.

*Students seeking certification in another state (outside Kentucky) should consult directly with that state for required courses.

SUPERVISION OF INSTRUCTION

(Supervisor's Certificate, Grades 1-12, and Rank I)*

(1) Professional Education ..... 9-12 semester hours
Must include: EDUC 500, 511, 670
Suggested courses: PSYH 470G, 650, EDUC 501

(2) Specialization Component ..... 9-12 semester hours
Must include: EDAD 654, 660, 675
PSYH 565 and 640
(If all are needed, one may be applied to Component 3.)

(3) Related Fields ..... 6-9 semester hours
Must include: Six hours of reading courses, EDUC 520 or 530, 620
(An undergraduate reading course may substitute for one).
Must also include: 603, 604
Suggested courses: EDUC 468G, PSYH 600, 650, EDAD 630.
A minimum of four 600 level courses are required; a maximum of two 400G level courses may be taken.

*Student outside Kentucky should consult appropriate officials in their own state for certification requirements for the position.

DIRECTOR OF PUPIL PERSONNEL

The program of preparation for the Professional Certification for School Administration and Supervision, endorsed for the position of Director of Pupil Personnel, shall consist of a

minimum of 45 semester hours' graduate credit, including the master's degree, and shall include the preparation marked with an asterisk below.

One must hold either the Standard Elementary Certificate or the Standard High School Certificate, and must have 9 hours from the courses listed below including EDUC. 500 and PSYH 600 unless taken at the M.A. level.

EDUC 502 - Curriculum Design
*EDUC 500 - Methods of Educational Research (required)
*PSYH 600 - Advanced Human Development (required)
PSYH 470G - Theories of Learning
EDUC 501 - History and Phil. of Educ.
EDUC 511 - Tests and Measurements

I. Professional Education ..... 9-12 semester hours
(9 hours selected from above)
If all courses have been taken, appropriate selections may be made from Component II and III below.
**EDUC 670 - Directed Field Project

II. Specialization Component ..... 15-18 semester hours
*EDAD 642 - Administration of Pupil Personnel Services
*EDAD 643 - Pupil Personnel Accounting and Record Management
*EDUC 401G - Introduction to Guidance and Counseling
*PSYH 565 - Psychology of Exceptional Children
*EDUC 573 - Computers in Education
EDAD 600 - School and Community Relations
EDAD 630 - School Law
EDAD 645 - School Organization and Administration

III. Related Fields ..... 6-9 semester hours
EDAD 640 - School Finance & Business Management
PSYH 452G - Abnormal Psychology
SOCI 511 - Educational Sociology
EDUC 603 - Elementary School Curriculum
EDUC 604 - Secondary School Curriculum

*Required for certification for Director of Pupil Personnel
**Required for Rank I

When the courses marked with one asterisk above have been completed, the student is eligible for the certification-Director of Pupil Personnel, but in order to obtain Rank I the student must complete additional hours totaling 30 hours above the Master's, including 12 hours of 600 level courses.

*Must have three years successful teaching experience.

SPECIAL COOPERATIVE NURSING PROGRAM UNION COLLEGE - BELLARMINE COLLEGE CURRICULUM FOR M.S.N. PROGRAM

A cooperative arrangement between Union College and Bellarmine College will provide registered nurses from the eastern Kentucky area an opportunity to pursue a bachelor's and Master's degree in nursing at Union College. Selected liberal arts and elective courses will be taught by Union College faculty; professional nursing courses will be taught by Bellarmine College faculty on the Union College campus. Clinical experiences will also be offered in the area.

The M.S.N. Degree will be conferred by Bellarmine College. This program will offer the registered nurse an opportunity to receive a M.S.N. without leaving eastern Kentucky. For further details contact the Graduate Affairs Office.

Course Descriptions

Each course is offered for three semester hours of credit unless otherwise noted.

BIOLOGY

BIOL 561. Topics in Biological Science

A lecture and discussion approach to topics and issues of contemporary importance and interest in the biological sciences. One topic will be extensively explored each term or semester that the course is offered. The course may be repeated when an alternate topic is emphasized. Possible topics include: Cancer, Immunobiology, Human Evolution, Human Reproduction and Development, Human Genetics, Plants and People, etc.

BIOL 595. Research Investigations

An independent research problem in which the student must demonstrate his ability to employ the scientific method in carrying out an original scientific investigation. A typewritten and bound manuscript will be required. An examination may or may not be given, depending on the nature of the problem selected. Prerequisite: Permission of the instructor and approval of the head of the department.

EDUCATION

EDUC 401G. Introduction to Counseling and Guidance.

Educational, sociological, and psychological foundations of counseling and guidance in schools, colleges and related service oriented agencies. Includes essential counseling and guidance services, policies, practice and procedures.

EDUC 435G. Laboratory Experiences in Education.

A substitute for student teaching for elementary majors. Considers current problems and trends in teaching with laboratory periods for construction of classroom materials. Classroom teaching experiences with elementary children are included. Prerequisite: One year of successful classroom teaching experience. Summer only.

EDUC 440G. Introduction to Early Childhood Education.

Survey of the physical, emotional, mental, and psychological development of the child under six, and the role of the kindergarten teacher in working with such a child.

EDUC 441G. Teaching Social Studies.

Methods and materials for the teaching of elementary school social studies including kindergarten through eight curricula. The philosophies, terminology, and evaluation methods and materials will be included.

EDUC 468G. Educational Media.

Gives practice in operating educational media and construction of classroom materials. Emphasis given to educational television use in the classroom.

EDUC 500. Methods of Educational Research.

Types of research, selection of problems, collection and classification of data; organization, presentation, and interpretation of materials. Includes unit on computer use and practice.

EDUC 501. History and Philosophy of Education.

Historical antecedents of American education as well as an analysis of the growth of various educational philosophies are explored. Particular attention is given to the five main philosophical approaches to teaching - essentialism, experimentalism, reconstructionism, existentialism and perennialism with a major emphasis placed on students developing a rationale and strategy for incorporating these ideas in the classroom setting.

EDUC 502. Curriculum Design.

Curricula organization, materials, and methods. Techniques for evaluating and constructing curricula.

EDUC 510. Basic Statistics.
Designed to aid teachers and administrators in their understanding and use of elementary statistical terminology and procedures. A limited set of statistical concepts useful in analyzing data from published research is presented as part of the course.

EDUC 511. Tests and Measurements.
Instrument and techniques for evaluating abilities, aptitudes, personality traits, and interests examined and teacher-made evaluative instruments given special emphasis. Application of test results to vocational and educational guidance stressed.

EDUC 520. Techniques and Materials for Classroom Reading Instruction.
A foundation course which includes a general review of the following reading skills: Word recognition, comprehension, and fluency. Also, an in-depth study of the various approaches to teaching, reading will be included. Students will become familiar with various techniques of instruction, the organization of the reading program, and a variety of reading materials. Simple methods of diagnosis are discussed.

EDUC 530. Diagnostic and Remedial Procedures in Reading.
Current research findings in diagnostic and remedial procedures in reading. Techniques for applying diagnostic instruments for locating causes of serious reading deficiencies are developed, along with suggested remedial procedures.

EDUC 532. Techniques and Materials for Remedial Reading.
Techniques and materials appropriate to the diagnosis and correction of reading difficulties. Course requirements include auditory and visual screening, diagnostic testing, and conduction of a clinical case study. Prerequisite: Education 530.

EDUC 535. Practicum in Teaching Reading with Clinic.
Practice involving traditional and behavioral science methodologies for remediation of reading disabilities. Extensive experience using group methodology that employs operant conditioning, repondent, and perceptual learning paradigms. Normally taken concurrently with Psychology 525 - Psychology of Reading.

EDUC 542. Fundamentals of Kindergarten Education.
This course focuses on kindergarten curriculum, materials, organization of the kindergarten program, creative experiences for the pre-school child, parent education and home visitation, understanding of families, community resources, planning learning experiences, and evaluation of pupil programs and progress. Direct observation and participation in the kindergarten setting.

EDUC 545. Practicum in Kindergarten Education. (Six hours credit)
This course offers direct, guided, supervised experience with kindergarten children under the supervision of a qualified kindergarten teacher.

EDUC 550. Foundations of Gifted Education.
A study on gifted education that will enable teachers to identify and work with the gifted student. Includes discussion of the various categories of giftedness other than I.Q. The course will also include: screening and evaluating, needs assessment, and counseling techniques.

EDUC 551. Curriculum Development for Gifted Education.
This course involves designing curriculum models and curriculum guides, and developing scope and sequence charts for gifted education. The course offers exploration into the different types of programs and how these programs will be implemented. It will make an attempt to fit the program to the giftedness of individual students.

EDUC 552. Instructional Strategies and Materials for Releasing Creativity in Gifted Education.
The course focuses on instructional strategies and materials needed for releasing creativity for the gifted student. It will have a relaxed atmosphere conducive to drawing forth creative and inductive thinking on the part of the student. A variety of sources of materials will be used.

EDUC 553. Practicum for Gifted Education
A supervised practicum course in gifted education for teachers who have successfully completed at least three years of teaching experience. The course emphasizes working directly with gifted students; writing units, lesson plans, developing learning centers, and doing demonstration teaching in the classroom with gifted students from the community.

EDUC 560. Supervision of Student Teaching.
Designed for classroom teachers who assume the responsibility of supervising student teachers. Experiences deemed necessary for developing students into effective teachers are considered. Prerequisite: One year of teaching experience or consent of the instructor.

EDUC 561. Internship for the Supervising Teacher. (Two-four hour credits)
A follow up course for Education 560, primarily in the field with part time on the campus in seminars, reports of action research with and about student teaching, honors teaching, and evaluation. Open only to those who have had Education 560 and who have a student teacher during the course.

EDUC 573. Computers in Education.
Designed for teachers, supervisors and administrators. A hands-on experience with microcomputer operation, introduction to BASIC, use of software, and information about instructional and management uses in schools. No previous experience with microcomputers required.

EDUC 595. Graduate Independent Study. (one-three hours)
Guided study and research toward the solution of specific educational problems encountered by students. Open to students at 5th year level.

EDUC 599. Thesis (by arrangement) — Six hours credit

EDUC 600. Advanced Curriculum.
Study of theory, principles, practices, procedures in current curriculum development and reorganization. Prerequisites: Education 502, 603, or 604 or by permission of professor.

EDUC 603. Elementary School Curriculum.
Curricular organization, materials, and methods currently used in elementary schools. Techniques for evaluating and constructing curricula.

EDUC 604. Secondary School Curriculum.
Curricula organization, materials, and methods currently used in secondary schools. Techniques for evaluating and constructing curricula.

EDUC 620. Teaching Reading in the Content Field.
Consideration of provisions and procedures for developing reading skills needed at the upper elementary and junior-senior high school level; various types of reading improvement programs, reading tests, and remedial programs at the upper grade levels. Education 520 or 530 recommended as prerequisites.

EDUC 670. Directed Field Project.
Required of all students who are seeking Rank I Classification. The student may work on a special project in his/her school or school system and may register any term to complete the work within six months from the time of registration. Prerequisites: Education 500 highly desirable; student must confer with instructor and have earned 12 hours toward Rank I.

EDUC 695. Graduate Independent Study.
Guided study and research in area pertinent to the needs of the student at the 6th year level.

EDUCATIONAL ADMINISTRATION

EDAD 630. School Law.
History of legal provisions for public education in the United States, interpretation and application of present school law, federal and state.

EDAD 640. School Finance and Business Management.
Federal, state and local financing of schools, equalization of education opportunities, sources of school revenue, school budgets, business methods of accounting.

EDAD 642. Administration of Pupil Personnel Services.
Emphasizes roles and responsibilities related to the organization and administration of pupil personnel services.

EDAD 643. Pupil Personnel Accounting and Records Management.
Emphasizes systematic procedures in pupil personnel accounting and records Management as related to the financing of public education and the protection of student rights.

EDAD 645. School Organization and Administration.
Organization of the modern public school, an understanding of such problems as staff-teacher relationships, program of studies, teacher records and reports, personnel and public relations, utilization of teacher time and physical facilities.

EDAD 650. School Plant and Transportation.
Planning, construction and maintenance of school plants. Also considers operation and administration of program for pupil transportation.

EDAD 654. Improvement of Instruction Through Supervision.
Techniques and methods for improving and evaluating classroom instruction in a modern day setting.

EDAD 655. The Elementary School Principal.
An analysis of the role of the principal in the modern elementary school.

EDAD 656. The Secondary School Principal.
An analysis of the role of the principal in the modern secondary school.

EDAD 660. School and Community Relations.
An examination of school-community relationships. Special emphasis on leadership roles, operational modes, communication with regard to public school relations.

EDAD 675. Internship and Seminar in Administration.
A total of 90 block hours in a practicum situation under a qualified administrator is required with a written record of experiences. Student qualifying for certification in Supervisor of Instruction must have experience under a general supervisor; students qualifying for elementary principalship must work under an elementary principal; students qualifying for secondary principalship must work under a secondary principal. Two seminars are held on campus. Prerequisites: EDAD 654 and EDAD 655 or 656.

ENGLISH

ENGL 401G. Modern Grammar.
A survey of modern approaches to the study of language beginning with the structuralist view of linguistic analysis through the theories of generative grammar to the most recent development in generative semantics. Considerable attention paid to the possibilities of practical application of linguistic theory. Even years only.

ENGL 402G. Advanced Composition.
For the student who wishes to become a more competent writer. Research papers, factual narratives, argumentation, and "creative" writing are assigned according to the needs and aptitude of the student.

ENGL 419G. Composition for Teachers.
Review of basic elements of composition with regular writing assignments in both expository and argumentative modes. Techniques of marking and evaluation of student papers. Research techniques, a methodology for teaching students to develop a research paper and practical application of the methodology through the assignment of a research paper as an integral part of the course itself. (On demand).

ENGL 421G. History of the English Language.
A study of the origins and development of the English language from Anglo-Saxon times to the present. Supplementary readings in early and medieval English history with emphasis on the effects of historical events on language change.

ENGL 521. Advanced Study of English Literature, 500-1700.
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 522. Advanced Study of English Literature, 1700-Present.
Intensive study of some phase of English literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 541. Advanced Study of American Literature, 1600-1860.
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 542. Advanced Study of American Literature, 1860-Present.
Intensive study of some phase of American literature within this period. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 572. Special Topics in Literature.
Intensive study of a literary topic of special interest to secondary teachers. This course may be taken more than once providing that the course content is different. The class schedule will designate the specific content covered.

ENGL 595. Independent Study in English.
Independent study of research on an approved topic. May be repeated for credit.

ENVIRONMENTAL STUDIES

ENVS 469G. The Appalachian Environment.
Conservation of natural resources including soil, water, wildlife and forests as interrelated components of the environment. Current problems relating to the environmental quality of the Appalachian region. Prerequisites: Two courses in environmental studies or biology and some knowledge of economics. Offered in Summers and on demand.

ENVS 550. Environmental Education Strategies.
A two-week workshop designed to foster a greater understanding of our environment through a combination of classroom and direct first-hand experiences. Conducted in cooperation with the USDA Forest Service and the Kentucky Division of Forestry. Offered in Summer only.

GENERAL SCIENCE

GNSC 401G. Science: Concepts, Processes, and Inquiry
The student will examine the processes of science such as collecting data, measuring, predicting, formulating hypotheses, and experimenting. With the laboratory materials from the new science programs, he/she will explore their use in teaching children these processes. As materials from such programs as ESS, SCIS, IME, IIS, ISCS, are used, the basic concepts as well as content of science will be reviewed. The inquiry approach to teaching a science will be stressed, along with learning theory and laboratory equipment use (commercial and handmade).

GNSC 525. Science for the Elementary Grades.
Application of modern learning theories and psychological foundations to the teaching of science in the elementary grades. Includes discussion of trends in science education, applications of research to teaching, and special problems that occur in schools.

GNSC 561. Topics in Physical Science
Enrichment and updating of elementary and high school teachers on selected topics in astronomy, physical science and modern physics. Selected scientific American off-prints will be reviewed. Course will include several lecture demonstrations and hands on experience with some laboratory equipment.

GNSC 584. Plate Tectonics
A theory which professional geologists scoffed at only a few years ago, has revolutionized earth science in the last two decades. In this combination lecture/laboratory course, students will construct models and analyze actual data to reconstruct the historical development of this important theory.

GNSC 595. Independent Study.

HEALTH

HLTH 451G. School and Community Health.
Reveals the relationship needed between the school and community to promote the total health of the population. Speakers are secured from official agencies, voluntary agencies, professional agencies, sponsored agencies, and other colleges. Small groups are utilized for discussion, field trips, and study through audio-visual aids.

HLTH 475G. Critical Areas in Health.
Specific health problems confronting society today with particular reference to secondary age students.

HLTH 551. Readings in Health.
A course enabling the student to research the literature in the area of health, not only to increase his basic knowledge, but to acquaint him with current trends and issues.

HLTH 582. Safety Education.
Accident problems in the home, in the school, at work, and on the highways are discussed with the purpose of being able to influence those who teach by preparing them in the various areas of safety. Groups specialized in a variety of safety areas, such as National Safety Council, American Red Cross, Bureau of Mines, and Kentucky State Police will be utilized.

HLTH 595. Independent Study.
Independent study in the field of health. May include practical field experiences.

HISTORY

HIST 421G. The Middle Period (1821-1850).
A detailed examination of Jackson, politics, and the culture of the period. Emphasis is on the Age as one of chaos and concerns the conflicting interpretations of the period.

HIST 442G. Britain in the 20th Century.
The history of Great Britain since 1900.

HIST 446G. History of Russia.
The history of Russia since the 17th century.

HIST 470G. Twentieth Century America.
Selected topics on the Nation's history since 1900.

HIST 475G. Special Topics in History.
Designed for teachers in special areas of interest.

HIST 521. History and Culture of Appalachia.
This course focuses primarily on the impact of industrialization and modernization in Southern Appalachia since the Civil War. It emphasizes the great diversity of historical and cultural experience within the Region.

HIST 531. The American Revolutionary Era.
The background of the revolution. Continental Congress and the Confederation at work; internal problems and strife; military and naval events; foreign relations; the road to final independence and peace. Even years only.

HIST 551. Civil War and Reconstruction.
A study of the Civil War and Reconstruction period in American history.

HIST 595. Independent Study. (by arrangement)

MATHEMATICS

MATH 531. Topics in Modern Math for Elementary Teachers.
A study from a Historical and Theoretical viewpoint of topics in mathematics taught in the elementary grades. Number systems, number theory, real numbers, logic, geometry, probability and statistics. Credit not granted to students who have completed both Math 203 and 204. (Offered summers only).

MATH 532. Modern Math Laboratory.
An active involvement in laboratory experiments with multibase blocks, sets, Cuisenaire rods, geoboards, etc.; development of skills in the production and use of teacher make material; problem solving techniques. Prerequisites: Math 531 or Math 203-204. (Offered Summers only).

MATH 595. Independent Study.

PSYCHOLOGY

PSYH 402G. Counseling Theories and Techniques.
Basic theories, types, and techniques of counseling. Practice in individual and group techniques of interviewing.

PSYH 430G. Social Psychology.
A study of psychology as it relates to society, culture and political-economy. The focus of the course creates a linkage between the theoretical concerns of social psychology and the activity we are involved with most often, work.

PSYH 431G. Mental Hygiene.
Factors determining the development of personality, principles of mental health, and problems involved in the dynamics of human adjustments.

PSYH 452G. Abnormal Psychology.
Mental disorder, changing concepts of normality, the more common forms of mental disorders, their psychological interpretation, principles of effective mental hygiene, and contemporary approaches to psychotherapy.

PSYH 460G. Theories of Personality.
Nature of personality structure and dynamics. Classical psychoanalysis, social psychological, and stimulus-response theories included.

PSYH 461G. History and Systems of Psychology.
Origins of psychological thought within science and philosophy, tracing the development of systems and theories with German, British and American psychology.

PSYH 470G. Theories of Learning.
Basic fundamentals of learning theory as formulated by such theorists as Thorndike, Pavlov, Guthrie, Skinner, and Hull. Attention is given to the empirical support of various theories plus recent developments in cognitive psychology.

PSYH 525. Psychology of Reading.
Theory and applications of learning principles as applied to the reading processes. Major emphasis relates to respondent, operant, and perceptual learning paradigms.

PSYH 565. Psychology of Exceptional Children.
Survey course of children with special educational needs. The nature, cause and intervention of exceptionality.

PSYH 595. Independent Study.

PSYH 600. Advanced Human Development.
Psychological development from birth to maturity. Emphasis upon the principal concepts and problems in the development of the individual.

PSYH 640. Group Processes.
A study of theory and practice in group dynamics. The process and implications of group processes, group counseling, and the human potentiality are explored.

PSYH 650. Advanced Educational Psychology.
The study of advanced psychological concepts and principles as applied to classroom management and student learning. Major emphasis is given to the translation of theoretical foundations of psychological knowledge to practical classroom applications. Behavioral, Cognitive, and Humanistic perspectives are explored in relation to teacher-student relationships.

SOCIOLOGY

SOCI 421G. Rural and Urban Sociology.
Comparative and interrelated study of urban and rural life considering the physical, institutional, social and economic factors of modern life in cities and in the countryside.

SOCI 435G. Labor Relations in Appalachia.
The restricted focus of this seminar will be an analysis, in historical and contemporary perspectives, of labor relations in central and southern Appalachia. While some attention will be given to various manufacturing activities including chemicals, clothing, furniture, brick-making and iron-making, emphasis will center upon work relations in coal and textile communities.

SOCI 460G. Sociological Theory.
The major theories which have proved useful in investigating the nature of society are examined as cultural products, ideologies, and scientific models. Special attention is given to major figures such as Comte, Durkheim, Weber, Merton, C. Wright Mills, White, and Sorokin in the emergence and convergence of their theoretical development. Lecture and discussion in a seminar setting.

SOCI 464G. Sociology of Deviance.
This course will develop an understanding of the social definitions and implications of deviance. Various types of deviant behavior and relevant theories of society will be addressed.

SOCI 511. Educational Sociology.
An analysis of schooling and education in a social, historic, and economic perspective. Special attention is given to the socialization of the child within and outside the school in light of the dominant culture forces in Western Society.

SOCI 595. Independent Study.

COLLEGE PERSONNEL

Graduate Studies Program Administration

JACK C. PHILLIPS, LL.D. ..... President
B. CARLYLE RAMSEY, Ph.D. ..... Vice President for Academic Affairs
H. WARREN ROBBINS, Ed.D. ..... Dean of Graduate Academic Affairs
E. EDWIN LeMASTER, M.A. ..... Registrar
CASSIE GALLION, A.A.S. ..... Secretary, Graduate Affairs Office

GRADUATE COUNCIL
1984-85

Dr. H. WARREN ROBBINS, Chairman ..... Dean of Graduate Academic Affairs
DR. JAN M. FINKEL ..... Professor of English
BILLY R. GIBSON ..... Graduate Student Representative
DR. ARTHUR H. HAFNER ..... Professor of Education
DR. A. JAMES KERLEY ..... Associate Professor of Education
DR. JEAN L. LETCH ..... Associate Professor of Education
DR. DERIL MAYS ..... Professor of Psychology
DR. PETE MOORE ..... Professor Health and Physical Education
DR. FRANCIS NUSSBAUM ..... Professor of Biology
MRS. VIRGINIA SADDLER ..... Head Librarian
DR. ROBERT SWANSON ..... Assoc. Professor of Environmental Studies
MRS. JANE B. SKIDMORE ..... Graduate Student Representative
DR. JOHN C. TAYLOR ..... Associate Professor of History
DR. DORIS B. THOMPSON ..... Assistant Professor of Education
DR. LESTER G. WOODY ..... Professor of English
DR. CARLYLE RAMSEY, Ex-Officio ..... Vice-President for Academic Affairs
DR. JACK PHILLIPS, Ex-Officio ..... President of the College

Faculty Elected to Teach Graduate Courses

SANTARAM CHILUKURI, *Professor of Physics; Chairman, Division of Natural Sciences* — B.S., M.S., Ph.D., Andhra University, India.

DIANNE R. FERRIS, *Professor of English; Chairperson, Division of Humanities* — B.A., University of Minnesota; M.A., Ph.D., University of Washington.

JAN M. FINKEL, *Professor of English; Head, Department of English and Foreign Languages* — A.B., Wittenberg University; M.A., Ph.D., Indiana University.

ARTHUR H. HAFNER, *Professor of Education* — B.S., Muhlenberg College; M.A., Lehigh University; Ed.D., Teachers College, Columbia University.

ELLA KAY HENSLEY, *Assistant Professor of Economics* — B.A., M.A., M.A.M.R.D., Ph.D., University of Florida; North Carolina State University; Cornell University.

A. JAMES KERLEY, *Associate Professor of Education; Head, Department of Education* — B.S., Tennessee Technological University; M.A., The Citadel; Ph.D., Florida State University.

NAZIR A. KHATRI, *Assistant Professor of Chemistry* — B.S., M.S., University of Karachi; Ph.D., University of Nebraska.

JEAN L. LETCH, *Associate Professor of Education* — B.A., Iowa State Teachers College; M.A., Ed.S., University of Northern Iowa; Ph.D., University of Iowa.

DERIL K. MAYS, *Professor of Psychology* — B.S., Union College; M.A., University of Kentucky; Ed.D., University of Tennessee.

JOHN H. McGRIFF, *Assistant Professor of Political Science; Director of Adult Continuing and Public Service Education* — B.S., M.A., Ph.D., Ohio State University.

PAUL S. MOORE, *Professor of Health and Physical Education; Chairman, Division of Applied Science; Head of Department of Health and Physical Education* — A.B., Union College; M.S., University of Tennessee; Indiana University; University of Oregon; Ed.D., University of Alabama.

FRANCIS E. NUSSBAUM, JR., *Professor of Biology* — B.S., Ohio University; Ph.D., Michigan State University.

REBECCA A. PETTYS, *Assistant Professor of Drama and Speech* — B.A., Berea College; M.A., Northwestern University; Ph.D., Indiana University.

ROBERT V. PETTYS, *Assistant Professor of Business; Acting Head of Department of Business* — B.A., M.A., Michigan State University; M.B.A., Ed.D., Indiana University.

B. CARLYLE RAMSEY, *Professor of History* — A.A., Miami Dade Community College, B.A., University of Florida; M.S., Ph.D., Florida State University.

H. WARREN ROBBINS, *Professor of Education* — B.S., Eastern Kentucky University; M.A., George Peabody College; Indiana University; University of Kentucky; Ed.D., University of Tennessee.

RONALD B. ROSEN, *Assistant Professor of Biology* — B.A., Hendrix College; M.S., Colorado State University; Ph.D., University of Manitoba.

C. RONALD ROSENSTIEL, *Assistant Professor of Sociology* — B.A., M.S., M.A., Ph.D., University of Kentucky.

BETTY S. STROUD, *Associate Professor of Music, Acting Head, Department of Music and Fine Arts* — B.S., Northeast Louisiana State University; M.M., Louisiana State University; Ed.D., University of Illinois.

Robert W. Swanson, *Associate Professor of Environmental Studies, Director of Institutional Research* — B.S., Purdue University; M.S., Indiana University Northwest; Ed.D., Indiana University.

JOHN C. TAYLOR, *Associate Professor of History; Chairman, Division of Social Sciences* — B.A., Juniata College; J.D., Duke University; M.A., Ph.D., Pennsylvania State University.

DORIS B. THOMPSON, *Assistant Professor of Education* — B.S., Livingston University; M.A., Ph.D., University of Alabama; East Carolina University.

ANDELYS WOOD, *Professor of English* — A.B., Middlebury College; Ph.D., Indiana University.

LESTER G. WOODY, *Professor of English* — B.A., University of Virginia; M.A., University of Richmond; Ph.D., University of North Carolina.

Adjunct Faculty Approved to Teach Graduate Courses

VIVIAN BOWLING BLEVINS, Assoc. Degree, Cumberland College; B.Ed., The University of Toledo; M.A., Eastern Kentucky University; Ph.D., The Ohio State University.

ROBERT L. GATTON, A.B., M.A., Union College; Ed.D., University of Florida.

ROBERT HAYES, B.A., Berea College; M.A., Eastern Kentucky University; Ed.D., University of Alabama.

DWIGHT C. HENN, B.S., Manchester College; M.Ed., Wittenberg University; Ed.D., University of Cincinnati.

JOYCE SUE HOPSON, B.S., Lincoln Memorial University; M.A., Union College; Ed.D., University of Tennessee.

KENIMER H. MORGAN, A.B., M.A., Mercer University; Ph.D., George Peabody College for Teachers.

MARSHALL E. RASNAKE, B.S., Ed.S., University of Tennessee; M.A., Teachers College, Columbia University; Ed.D., Memphis State University.

JAMES F. SIMPSON, B.S., Cumberland College; M.A., University of Tennessee; Ph.D., Vanderbilt University.

MURRELL P. STEWART, B.S., M.A., Eastern Kentucky University; Ed.D., University of Kentucky.

JOHN E. YATROS, B.S., Concord College, Virginia; M.A., West Virginia University; Ed.D., Indiana University.

Graduate Advisory Council
1984-85

Dr. Vivian Blevins*
Mr. Kendall Boggs
Dr. John H. Boyd
Mr. Eugene Burnett*
Dr. Robert Coleman*
Mr. Ted Corder
Mr. Mike Davis
Mr. Andy Dunn*
Mr. Steve Evans*
Dr. Mary Pauline Fox*
Dr. Robert Gatton
Mrs. Virginia Green*
Mr. Benny Hamby
Mr. James Harve Hampton
Mr. Paul Hansel
Dr. Robert Hayes
Mr. Jack Hendrix
Mr. Joshua Hensley
Mrs. Judy Hounshell
Dr. Chad Jackson*
Mr. Norris Keck

*New Members

Rep. Pearl R. LeFevers*
Mrs. Georgia Lloyd
Mr. Louie Martin
Mrs. Allie Mays
Mrs. Brenda McClure
Mr. Sherman McIntosh
Rev. R. Dean Meadows*
Mr. Wendal Mitchell
Mrs. Bettye Moody*
Mr. Cleophus Pursifull
Dr. Marshall Rasnake
Mrs. Mildred Rowland
Miss Valerie Saunders
Mr. Omus Shepherd
Mr. Astor Simpson*
Mr. Charles Singleton
Mr. Willie Sizemore
Dr. William (Bill) Slusher
Dr. Murrell Stewart
Dean Joan Stivers*
Mr. Jesse Taylor
Mrs. Grace Tolliver
Dr. Pat Wear*
Mrs. Alma Faye Webb

UNION COLLEGE
APPLICATION FOR GRADUATE STUDY

DEGREE / CERTIFICATION SEEKING STUDENTS: This application, a copy of the teaching certificate and the $15 admission fee should be mailed to the Graduate Office, Union College at least 7 days prior to the beginning of the session in which entrance is proposed. Two official transcripts of the applicant's complete academic record must be sent **directly to the Office of Graduate Affairs from the institution where the degree was received, or graduate work was completed. STUDENTS SHOULD NOT MAIL TRANSCRIPTS WITH APPLICATION. Applicants holding the baccalaureate degree or a Master's degree from Union College need not submit these transcripts. The admission fee is waived for students seeking Rank I and who have earned the M.A. degree from Union College.

**TRANSIENT STUDENTS: This application and the $15 admission fee should be mailed to the Graduate Office. Students may have either a letter of good standing sent from the institution they are transferring work to OR have two official transcripts of the undergraduate work sent to the Graduate Affairs Office. APPLICATION TO THE GRADUATE STUDIES PROGRAM DOES NOT AUTOMATICALLY ADMIT A STUDENT TO GRADUATE STANDING. The application will be processed and the student will be notified concerning his standing.

(PLEASE USE LEGAL NAME ONLY)

Miss
Mr. _____ Date _____
Mrs. Last Name First Name Middle

Spouse _____ Mrs. Maiden Name _____

Home Address _____
Street & Number City State Zip Code

Home Phone (___) _____ School Phone (___) _____ S.S. No. _____

Place of Birth _____ Date of Birth _____

Place of Employment _____

High School Attended _____ Date of Graduation _____

Colleges or Universities Attended:

Undergraduate Dates Degrees

Graduate Dates Degrees

Undergraduate Work _____ Second Major or Minor _____

Do you plan to work toward a degree at Union? _____ What Semester? _____

Are you working toward certification? _____ Are you a transient student? _____

Have you taken the National Teacher's Exam? Yes _____ No _____

Program of study you plan to pursue: ( )M.A., ( )Rank I, ( ) + 30, ( ) + 45, ( )5th Year

Do you hold a valid professional teaching certificate? Yes _____ No _____

What State? _____ Kind of Certificate _____ Cert. No. _____

For What Grades _____ For What Subjects _____

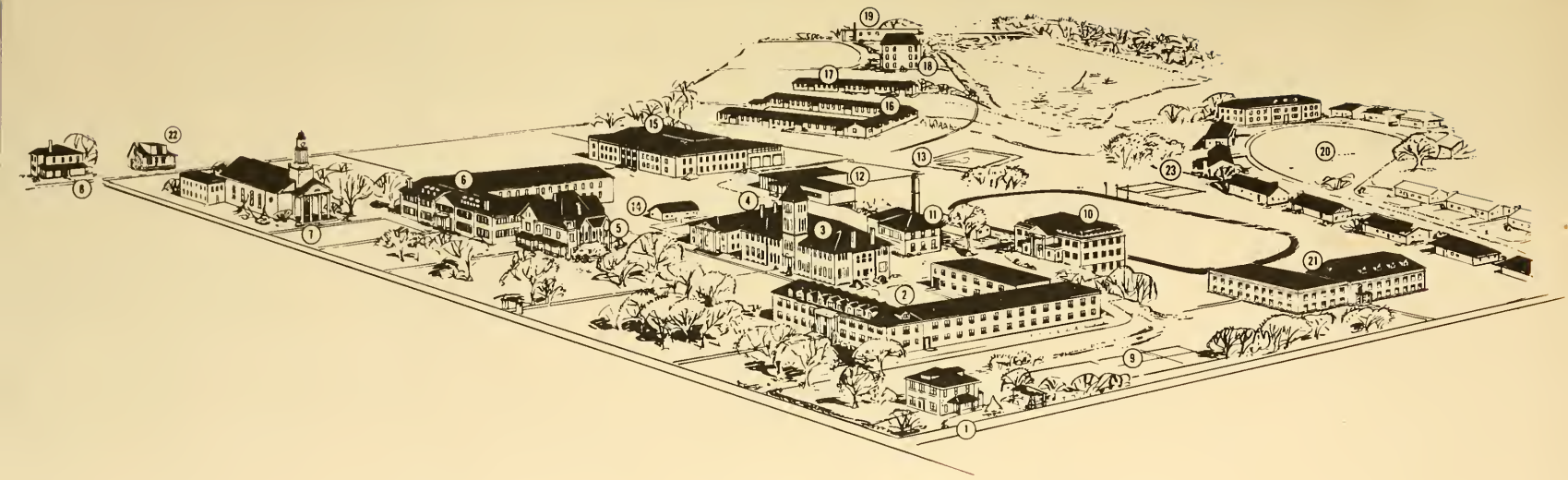
I certify that the above statements are correct and complete to the best of my knowledge.

Signed _____ Date _____

1985

INDEX

	Page
Administration	34
Admission to the Graduate Studies Program	8
Biology, courses in	26
Calendar 1985-86	4
Candidacy for Degrees	8
Comprehensive Examinations	10
Course Numbering System	12
Credit Load	9
Education, courses in	26
Educational Administration, courses in	28
Elementary Education Curriculum	18
Elementary School Principal Curriculum	21
English, courses in	29
English Curriculum	19
Expenses and Financial Aid	13, 14
Fifth Year Certificate	16
General Science, courses in	30
Gifted Education, courses in	27
Gifted Education Curriculum	18
Graduate Council and Faculty	34
Health, courses in	31
Health Curriculum	19
History, courses in	31
History of Union College	2
Housing	6
Independent Study	10
Kindergarten Curriculum	18
Learning Resources	6
Master of Arts Curriculum	18
Mission of the College	2
Planned Programs	9
Psychology, courses in	32
Psychology Curriculum	20
Pupil Personnel	24
Rank I Classification	23
Reading Specialist Curriculum	19
Residence Requirements	8
Science Curriculum	19
Secondary School Principal Curriculum	21
Social Studies Curriculum	20
Sociology, courses in	33
Sociology Curriculum	20
Supervisor's Certification Curriculum	24
Time Limits on Degrees	9
Transfer Credits	9



1. Baldwin Place, President's Residence
2. Stevenson Hall, Men's Residence
3. Centennial Hall
4. Library
5. Speed Hall, Administration Building
6. Pfeiffer Hall, Women's Residence
7. Conway Boatman Chapel—Fine Arts Building
8. Tye House
9. Tennis Courts
10. Dramatic Arts Center
11. Data Processing
12. Student Center
13. Colonel Sanders Field
14. Religious Life Center
15. Physical Education Building and Swimming Pool
16. College Courts, Married Students' Apartments
17. College Courts Addition
18. Lakeside Hall
19. Bureau of Mines Education Center
20. College Park, Faculty Housing
21. Mahlon Miller Science Center
22. Manchester Street Building
23. Tennis Courts

UNION
COLLEGE

BARBOURVILLE
KENTUCKY 40906
606/546-4151

S.B. Newman Printing-Knoxvi

Weeks-Townsend Memorial Library
Union College
Barbourville, KY 40906

Archives
378.9769 U58u
1984-1987
Union College catalogue.

HECKMAN
BINDERY INC.
JAN 89
N. MANCHESTER,
INDIANA 46962